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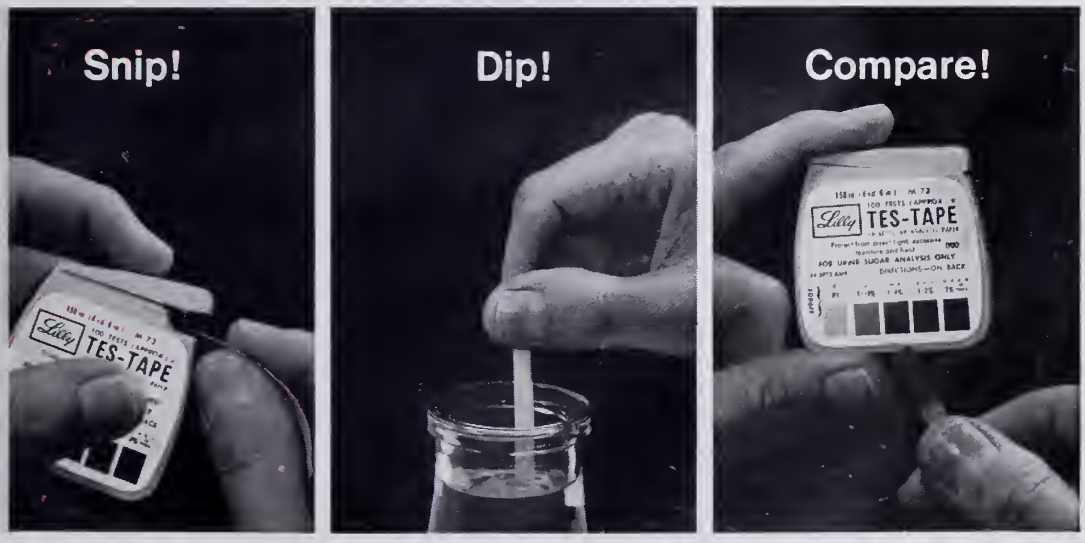
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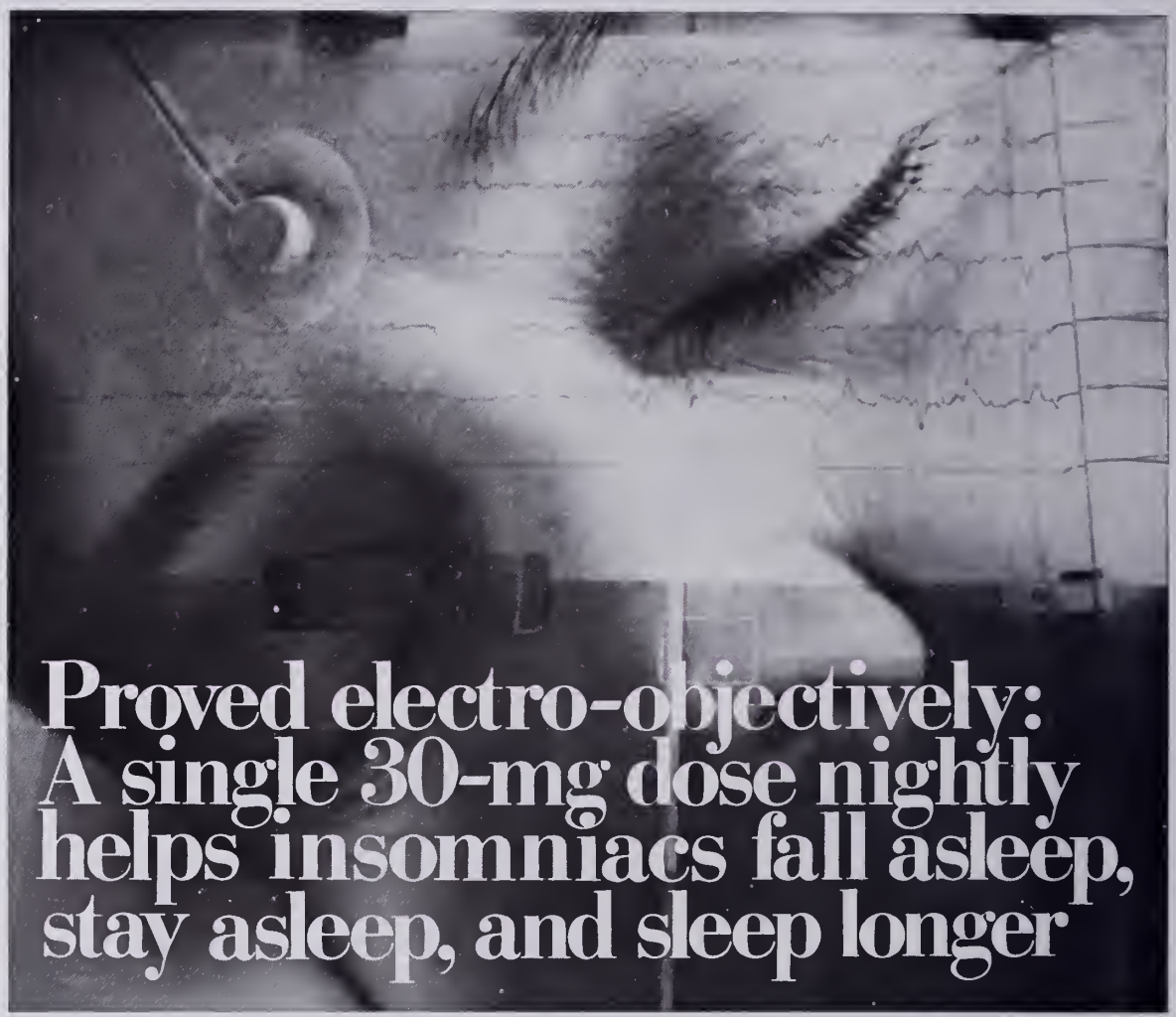
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Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.[1,2,3]

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,[1] Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

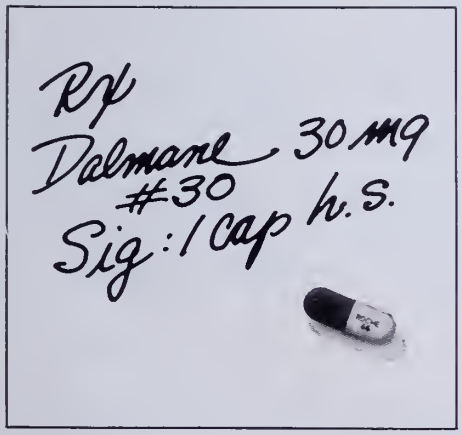
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.*: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.*: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • July, 1971 • No. 1

Office of Publication
19 So. Jackson St. — Montgomery, Ala. 36104
Subscription Price — $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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President's Page



Archie E. Thomas, M. D.

The problems confronting organized medicine aren't confined to treating the sick and keeping most of the people well.

If a suitable approach is to be worked out that will make medical care available to most of the people, the physicians will have to take the lead, notwithstanding what the politicians, sociologists, economists, bureaucrats, labor leaders and many so-called experts say.

There is a strong possibility that organized medicine can step forward with a plan from the county and state level that would be acceptable; and more inclusive carriers are becoming interested.

We have several approaches on the horizon, and it seems that there are two that are getting most of the attention at the present time.

Foundation medicine: This began in the San Joaquin Valley area of California in 1954 and enthusiasm and success of this program have attracted wide interest and approval over the nation. This concept carries with it the free choice of hospital and doctor; however, both have to belong to the foundation. The foundation plan is open to many carriers, and some do participate.

A foundation for medical care is an organization of doctors of medicine sponsored and controlled by a local county medical society; however it is entirely separate. It is governed by a board of directors which is selected by the county board of trustees, or the entire county society. The president of the medical society has complete charge of the program. Every member of the society is eligible and may renew his membership yearly. The dues are ten dollars. Seventy-five to 90 per cent of the societies belong where this approach is being taken.

This concept believes and practices local control of under and over utilization through peer review. The foundation establishes and accepts a maximum fee schedule. This insures coverage to all consumer groups covered by a sponsored program and increases the interest in other carriers, based on logical principles.

In retrospect, foundation for medical care is simply a highly organized, active committee of the medical society.

A condensed version of the administrations' position, health maintenance organization emphasizes prevention and early care. They provide incentives for holding down

costs and for increasing the productivity of resources; they offer opportunities for improving the quality of care; they provide a means for improving the geographic distribution of care; and by mobilizing private capital and managerial talent, they reduce the need for federal funds and direct control.

This has not been completely documented and I am sure there are some short-comings not visible on the surface.

HMO: This is the plan in which Mr. Nixon is very interested. This plan takes care of a given number through a prepaid aggregate fixed sum or capitation arrangement. Great emphasis is laid on the maintenance of health to prevent serious illness.

This approach differs from the other in that they do have to use the same physician and hospital; however, it is a modified group practice plan. The participants tell us that this approach is very popular on the West Coast.

After studying all these plans I sincerely believe that a comprehensive health approach with emphasis upon patients sharing in the cost (Medicredit) in keeping with their ability and with great emphasis upon group practice, (Clinics or outpatient care) with equal distribution of the effort and talent among the profession, reducing hospitalization to the very minimum, eventually will be the answer.

We have had this plan in Montgomery for 15 years.

It is our prayer and hope that organized medicine will take advantage of every opportunity to guide and direct these programs, and will have a strong voice in their final solution.

As we translate the above approaches into quality care, I am reminded of this quotation from Dr. Ralph E. Emerson of New York:

"As government tightens the reins over health care expenditures, it is incumbent on the medical profession to make certain that the quality of medical care is not sacrificed. Peer Review must be done, and must be done by physicians. This is a formidable assignment, and represents one of the many challenges of the 70's. As we approach this crossroad in the future of health care, the medical profession must respond to the question, Quo Vadis."

Respectfully submitted,
Sincerely yours,

Archie E. Thomas, M. D.
President

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Who's The Best Doctor?

The easiest question for any M. D. wife to answer is "Who's the best doctor?" The answer comes quickly and with certainty, "My husband." Your wife gives the same answer on days she's provoked with you. You're even the best when her allergy is killing her and you forgot the medicine.

This is not to suggest that all M. D. marriages are idyllic. We know they are not. Our divorce, drug and alcoholism rates lead all other professions. Therefore, this is a large target area for your Auxiliary this year.

I have noticed in my many Auxiliary years that our best attended programs are those dealing with the role of the doctor's wife. A recent poll of your wives demonstrates priority interests in building better marriages and families. The results of this poll will determine the selection of topics and speakers for our Auxiliary programs at our Fall Conference (October 26, 27, 1971, Birmingham) and at our convention (April 19, 20, 21, 1972, Montgomery). Our Mental Health chairman will constantly provide all counties with materials directed at strengthening our marriages and families. As we help ourselves, we believe we will help many others around us.

Remembering that it takes 'two to tango,' it takes the efforts of at least two persons for a good marriage and more for the best family relations. We believe you are interested in this project also. We are looking now for the best possible speaker for our convention for our traditional husband-wife luncheon.



Mrs. Gilder L. Wideman

Urge your Number One Auxiliary member to participate in these programs. She's married to a doctor and she needs this information. And when you're asked "Who's the best wife?," don't hesitate, speak up "My wife," You'll mean it too when she has been to her Auxiliary meetings.

Frances Wideman
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This Used To Be The Year's Fifth Month

This is July, the seventh month of the year.

Once it was the fifth month and named Quintilis, which is the Latin word for fifth. But that was before Julius Caesar got hold of the calendar, revised it, made this the seventh month, and renamed it for himself. He was born on July 12th.

The water lily is its flower, the blood-red ruby its gem, and it is a month of many other famous birthdays, including:

More war types, like John Paul Jones and David Farragut, Simon Bolivar, Garibaldi, and Robert Bruce; a couple of Presidents, John Quincy Adams and Calvin Coolidge; some rulers, Mussolini, Haile Selassie, Cardinal Mazarin; artists, Sir Joshua Reynolds, Maxfield Parrish, and Whistler; writers, Nathaniel Hawthorne, Thackeray, Alexander Dumas (father and son), and George Bernard Shaw; Mary Baker Eddy, who thought doctors superfluous; and Sir William Osler, who knew Mrs. Eddy was.

Not only a month of famous birthdays, it is also a month of famous deaths: Garfield's, from an assassin's bullet; John Huss's, at the stake, burning; and Alexander Hamilton's, in a duel with Aaron Burr, former vice president of the United States.

Mary Baker Eddy lived to be 89 years old, which was just about 29 years longer than Sir William Osler thought anyone should live. In fact some old timers may remember his storm-stirring speech in 1905 before Johns Hopkins University, in which he declared:

"In that charming Anthony Trollope novel, 'The Fixed Period,' the plot hinges upon the admirable scheme of a college into which at 60 men retired for a year of contemplation before a peaceful departure by chloroform. That incalculable benefits might follow such a scheme is apparent to anyone who, like myself, is nearing the limit, and who has made a careful study of the calamities which may befall men during the seventh and eighth decades."

He himself lived ten years beyond his allotted sixty.

And in conclusion remember that July is the birth month of the United States.

Responsibilities Delegated to Medicine; Sans Rights

The delicate balance between rights and responsibilities—that distinguishing characteristic of all good government—is seemingly out of adjustment in our country.

One hears much of the "rights" of underprivileged minorities, set apart by creed, color or economic condition, but with no mention of corresponding responsibilities.

One watches the parades of protesters, some orderly and some not, some with an element of justice in their demands and some with no pretense to reasonableness, some that begin with declarations of peaceful intent that degenerate into unreasoning, riotous mobs.

The television cameras diligently and viv-

idly record the more dramatic scenes from rioting and looting, with very special emphasis reserved for those so unfortunate as to stumble under a policeman's truncheon or the butt of a soldier's rifle.

The ready sympathy of the average American viewer finds itself swinging away from the uniformed enforcer of law and order and to the unhappy stumbler. Naturally, never knowing where is the next target, no TV camera yet has caught a policeman or fireman, at his job of earning a living, dropping with a sniper's bullet in his brain. For men in uniform, their responsibilities are obvious; their rights aren't so evident.

The delicate balance between rights and responsibilities, so necessary to all good government, is out of adjustment in our country.

Every business, every profession, every segment of American society had best look to its own "rights" in a rising tide of delegated responsibilities.

Medicine is no exception.

Guest Editorial

Ophthalmologists Needed In Areas Of 25,000 to 50,000

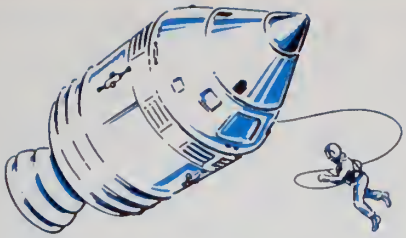
Ophthalmology is a very interesting and challenging specialty. The eye physicians who came before, left us an outstanding heritage which will be difficult to live up to. The American Board of Ophthalmology was the first established specialty board in this country (1916). Our specialty has a good record of continuing post-graduate training which is utilized by a high percentage of the practitioners.

Some of the objectives of ophthalmology are prevention of blindness and restoration of vision. The eye physician gets a unique opportunity to see patients who come to his office for an examination for eyeglasses. On these examinations, it is not uncommon to uncover early stages of glaucoma, amblyopia, or evidence of systemic disease. In this manner the ophthalmologist can practice a type of preventive medicine not afforded to other physicians. The ophthalmologist also gets an opportunity to see patients with neurological diseases who present themselves with eye complaints.

The trend in ophthalmology in larger communities is to specialize in sub-groups. Pediatric ophthalmology has a particular interest in strabismus, congenital glaucoma, and congenital cataracts. There is usually an ophthalmologist who limits his practice to retinal reattachments and other retinal pathology. This field has seen the introduction of the Lazer and the photo-coagulator which are used to seal off retinal holes. These instruments have some promise in the treatment of diabetic retinopathy cases. The ophthalmologist who has a particular interest in plastic surgery may choose to reconstruct eyelids and orbits, and perform operations for ptosis. In the larger medical communities, there is usually an ophthalmologist who limits his practice to neuro-ophthalmology.

In our state of Alabama there is a need for more ophthalmologists, particularly in the communities of 25,000 to 50,000 population. The ratio of ophthalmologists to population is considerably lower in our state than in the national average. In order to obtain the best eye care for the people of our state, it will be necessary to see that medical eye care for all the people is provided. We will have to train more ophthalmologists in our own institutions. To be able to train more ophthalmologists, there must be more full-time faculty, and a department which does some basic research in our field.

—Theo N. Kirkland, Jr., M. D.
Interspecialty Council, representing Alabama Academy of Ophthalmology and Otolaryngology



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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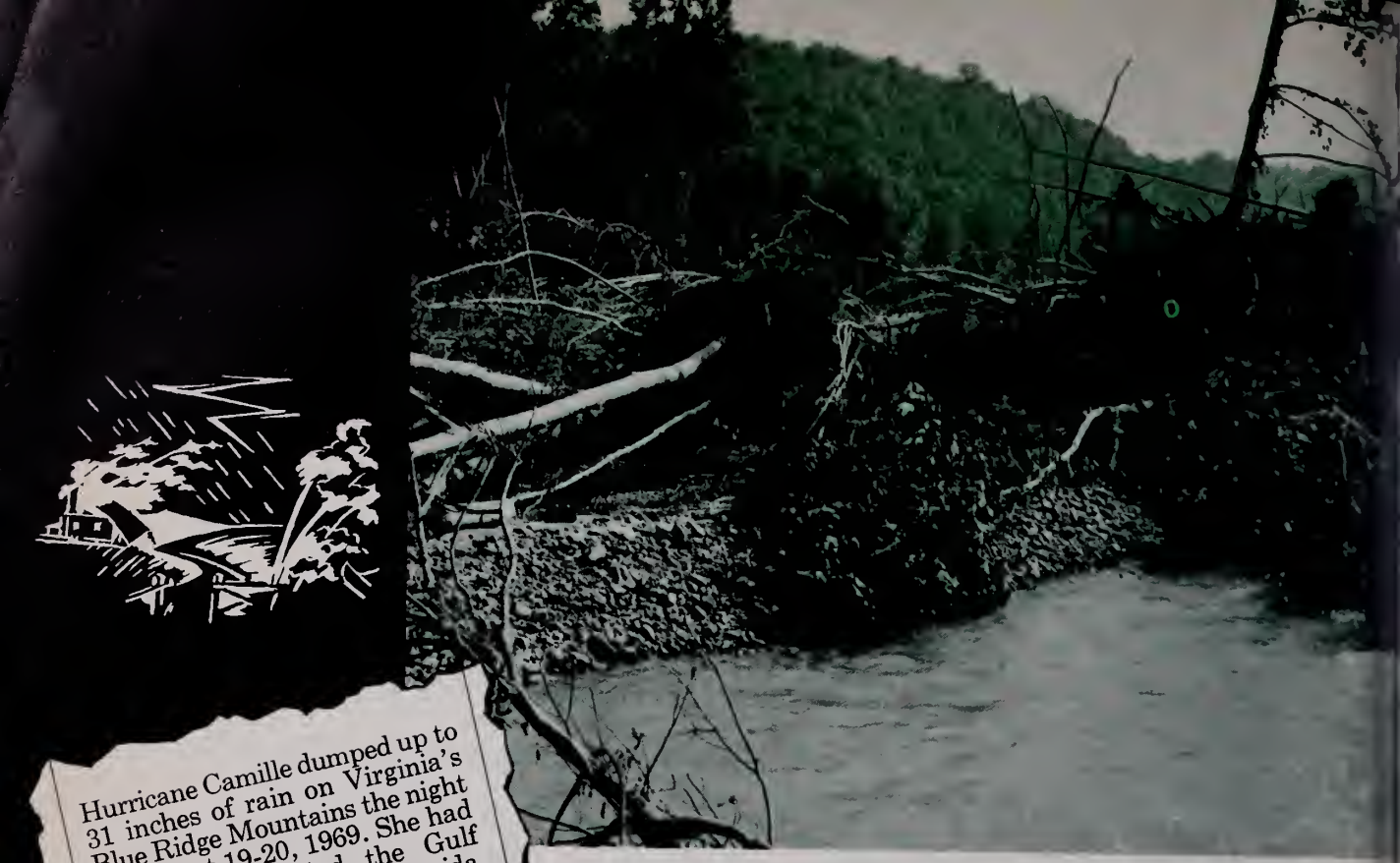
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This preparation is not indicated for use in treatment of cholesteatoma, where surgical intervention is necessary.

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Indications

Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications

Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings

When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children Not recommended for use in children under 12 years of age.

Precautions

In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration

The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage

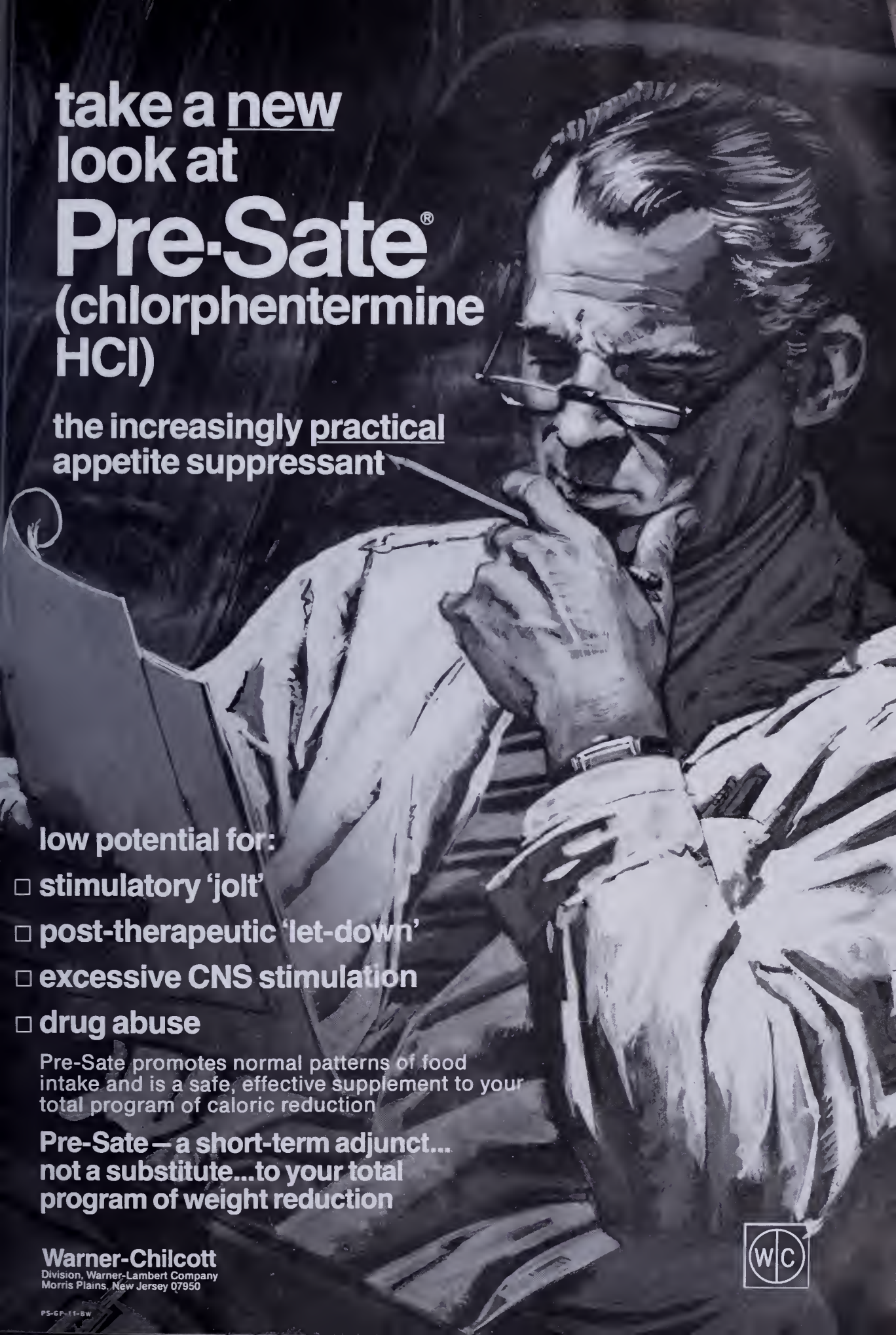
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied

Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base, bottles of 100 and 1000 tablets.

Full information is available on request.

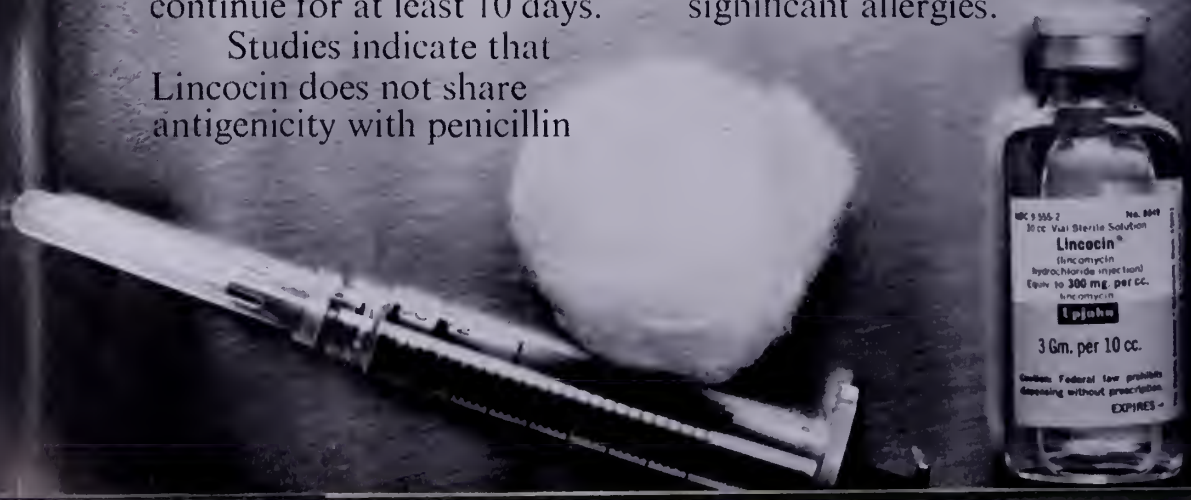

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Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With ß-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



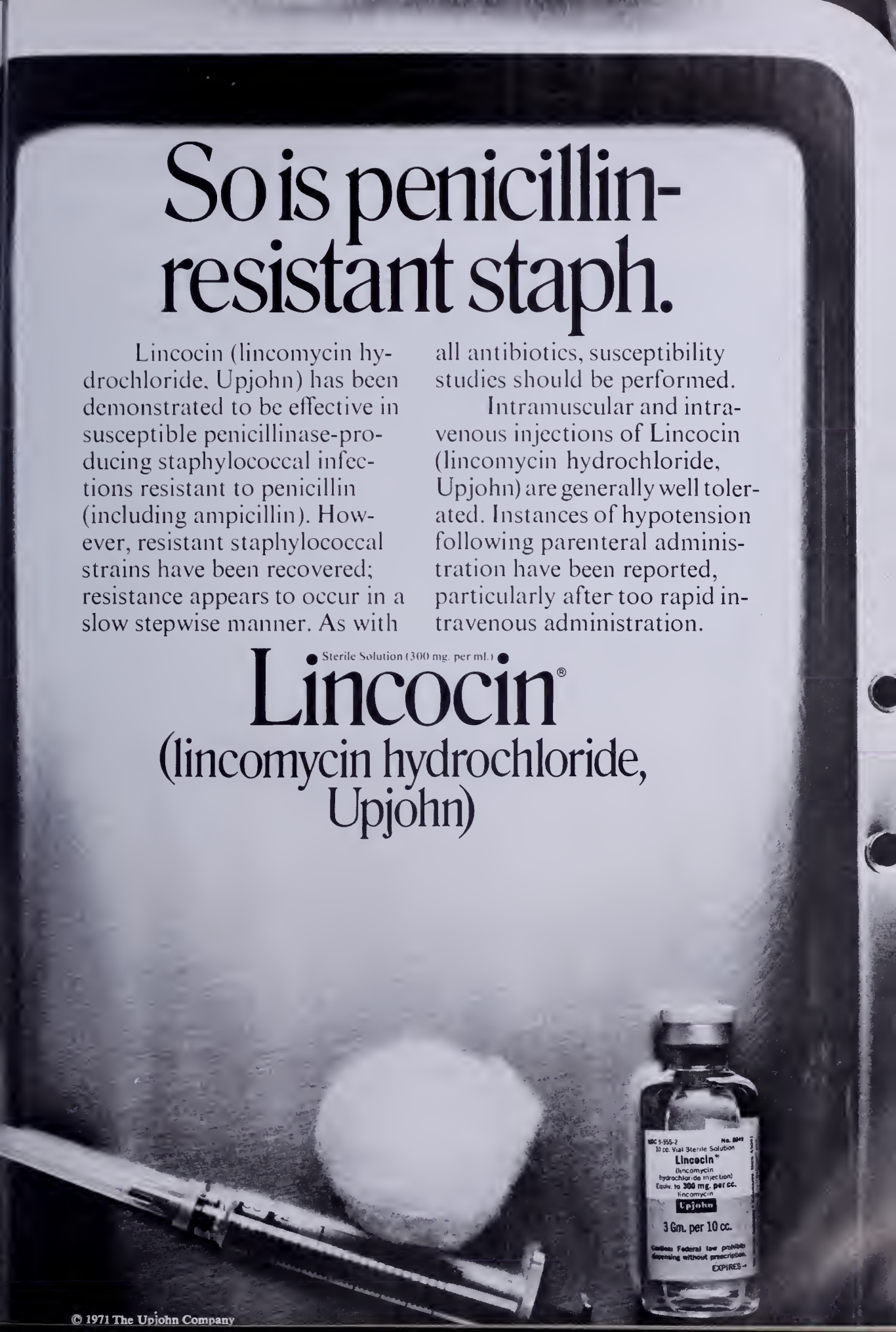
So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

Sterile Solution (300 mg. per ml.)

Lincocin®
(lincomycin hydrochloride, Upjohn)



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.

Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

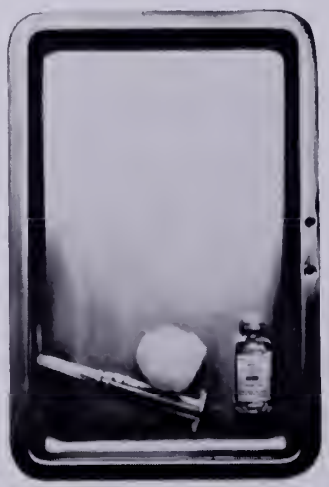
Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

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Hobbies To Fill A Doctor's Leisure

Dr. Henry Spira Collects Sets Of Chessmen

Whoever wrote the song, "he's got the world in his hands," had a baby in mind. But more than a hundred years ago, Dr. Thomas H. Huxley called the world a chessboard.

An Alabama doctor's hobby is collecting these worlds . . . or, rather, the pieces that play on them: the kings and queens and bishops, the knights and rooks and pawns.

He is Henry Spira, M. D., F. A. P. A., of Birmingham, a native Austrian, an alumnus of the University of Vienna who fled the Nazi terror in 1939 to earn Science degrees from Mercer University, Macon, and his M. D. from the Medical College of Alabama, specializing in Psychiatry.

Dr. Spira developed in childhood his interest in the game that dates back at least 6,000 years, that has fascinated such personalities as Napoleon, Voltaire, and Frederick the Great, and was popularized in this nation by Benjamin Franklin. He has been an enthusiastic player, "though not a very good one," since he was a little boy, in the years immediately following World War I.

Some 14 nationalities may lay some claim to the origins of chess. For the record they are (says Britannica): Greeks, Romans, Babylonians, Scythians, Egyptians, Jews, Persians, Chinese, Hindus, Arabians, Araucanians, Castilians, Irish and Welsh. So it is appropriate that the oldest chess set in Dr. Spira's collection comes from one of the most valid claimants—China.

And one of the loveliest sets was made by Mrs. Spira, whose hobby is ceramics.

Dr. Spira is interested in obtaining other unusual or historical sets.



Collecting sets of chessmen is the fascinating hobby of Henry Spira, M. D., Birmingham Psychiatrist-Neurologist:—1) A modern set from Greece, made of bronze, figures copied from statues and paintings from ancient Greece; 2) a 200-year-old set from China (where the game of chess may have originated), Emperor, Empress, foot soldiers and soldiers mounted on elephants, in red and white ivory; 3) "home-made," greenware painted and baked by Mrs. Spira, a ceramics hobbyist; 4) Dr. Spira; 5) a set from Spain, purchased by Dr. Spira's mother and brother on last year's Majorcan Carnival, characters from Don Quixote; and 6) a modern set carved in wood, made in Italy, colored in white and brown, with Egyptian Pharaoh and his court as characters.

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Published Under the Auspices of the Board of Censors

Volume 41 July, 1971 Number 1

Reported Gastrointestinal Symptoms And Signs Before And After Dietary Counsel

by

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and

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Associate Professor in Oral Medicine

Abstract

It is clinically well known that classical chronic disease is preceded by a long incubation period. At first, the symptoms and signs are few and diverse. With time, there is localization in an organ or system. Finally, the findings crystallize and fit the textbook picture which allows a definite classical diagnosis. This report shows that, with advancing age, reported gastrointestinal symptoms and signs increase. This study of dentists and their wives also demonstrates that the pattern can be slowed, stopped, and sometimes actually reversed with simple dietary advice.

Introduction

One of the characteristics of the aging process is the progressive increase in symptoms and signs. Initially, and this is most prevalent in the younger years, the clinical findings are seemingly unrelated [Figure 1]. For example, there is a symptom in one organ system and a sign in another area. With time, the findings become more numerous and more localized in one or another area. Finally, the symptoms and signs crystallize, according to textbook description, so that a diagnosis of a specific syndrome [e.g., arthritis, cancer, heart disease] is possible.

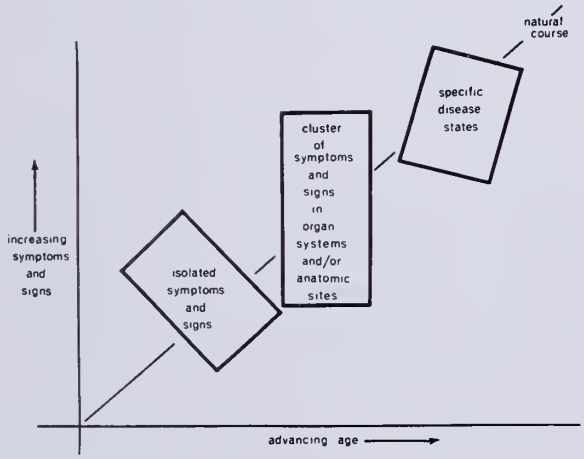


Figure 1. The genesis of chronic disease. Prior to the labelling of a specific disease state [box on the right], there is a long incubation period. At first, there are a very few isolated and seemingly unrelated symptoms and signs [box on the left]. One or more may be of a gastrointestinal nature. Later, there is an increase and localization of findings [middle box] with more gastrointestinal symptoms and signs.

From the Department of Oral Medicine, University of Alabama Medical Center, Birmingham, Alabama.

Clearly, the optimal point to interrupt the pattern is early during the amorphous period. However, the evidence at this stage is subtle, and the changes can only be minimal.

Evidence was earlier presented[1] that the course of disease can be altered early. The data offered indicated that a stopping, slowing, or reversal in the overall *general* symptoms and signs can be effected during the incubation of chronic disease. Finally, the changes may, in part, be possible through relatively simple dietary means.

This report examines the same population[1] in terms of *gastrointestinal* symptoms and signs instead of *all* symptoms and signs. Specifically, an attempt will be made to resolve the following *three* questions:

1. What is the pattern of reported gastrointestinal findings in presumably healthy subjects?
2. Can the pattern be influenced by dietary counsel?
3. Of what significance is this observation?

Method of Investigation

Two hundred forty dentists and 191 wives participated in this program. These individuals are currently sharing in a multiple testing program in Florida under the auspices of the Southern Academy of Clinical Nutrition; in Los Angeles under the direction of the Southern California Academy of Nutritional Research; and in Columbus under the aegis of the Ohio Academy of Clinical Nutrition.

At the initial visit, each subject completed the Cornell Medical Index Health Questionnaire. This is a self-administered form consisting of 195 questions to be answered yes or no[2]. The questions are so structured that a positive answer suggests pathology. Hence, by simply summing the number of affirmative responses, one can derive a crude estimate of disease status. One area [Section D] deals with 20 questions relating to the gastrointestinal system. Table I summarizes the data for the 431 participants. Three points deserve particular mention. First, the average score for the entire group is 2.1. Second, the group values range from a low of zero to a high of eleven. Lastly, evidence is available to indicate that gastrointestinal complaints are more common in this population than symptoms and signs in any other single system. This is particularly noteworthy since there is evidence to indicate that, generally, health-conscious persons are more apt to participate in health evaluation projects of this type[3].

Table I
gastrointestinal distribution

gastro-intestinal complaints	number of subjects	percentage of subjects
0	88	20.4
1	127	29.5
2	79	18.3
3	55	12.8
4	30	7.0
5	23	5.3
6	9	2.1
7	5	1.2
8	8	1.9
9	3	0.7
10	3	0.7
11	1	0.2
total	431	100.0*
mean	2.1	
S.D.	2.1	
minimum	0	
maximum	11	
range	11	

*approximate

At the initial visit, each subject completed two dietary records. One consisted of recording all foods consumed for a seven-day period*. A second form, called the Dietronics Dietary Analysis** is a simple questionnaire designed to determine the dietary habits based upon food frequency[4,5]. The

*Dicalator System, Post Office Box 3217, Olympic Station, Beverly Hills, California

**Dietronics Dietary Analysis, Hanson Research Corporation, Post Office Box 35, Northridge, California 91324

dietary forms are submitted to a computer center, and a printout is derived setting out the daily intake of the major foodstuffs and the vitamins and minerals.

The group reconvenes almost annually. The Southern Academy of Clinical Nutrition has now been underway for five years. The Southern California Academy of Nutritional Research and the Ohio Academy of Clinical Nutrition are in their third years. At each re-examination, the Cornell Medical Index Health Questionnaire and the two dietary forms are restudied.

Results

Question One: Table II summarizes the gastrointestinal responses for the sexes

Table II
gastrointestinal distribution

	age groups <40	40-49	50+
initial visit			
male group	[101] 1.9±2.2	[92] 2.2±2.1	[46] 2.3±2.1
female group	[99] 1.7±1.4	[66] 2.6±2.4	[26] 1.9±2.0
second visit			
male group	[30] 0.8±0.8	[33] 1.7±2.3	[30] 1.8±1.8
female group	[29] 0.8±1.2	[21] 1.7±1.8	[13] 1.1±1.4

[sample size]

separately in terms of age at the initial examination. Three points are clear. On a mean basis, the scores in the male group rise with age. Second, with advancing time the number of complaints does not increase in the female group. Finally, the age and clinical findings are not statistically significant [Figure 2].

Discussions were conducted to show the individual gastrointestinal scores. Additionally, the dietary patterns were considered. Generally speaking, the groups consumed large amounts of refined-carbohydrate foods, marginally low protein intake, and suboptimal amounts of vitamins and minerals according to the Recommended Dietary Allowances set forth by the Food and Nutrition Board of the National Research Council[6]. The lectures included methods for correcting the diet as previously published[7].

At subsequent visits it was possible to compare the changes in the gastrointestinal

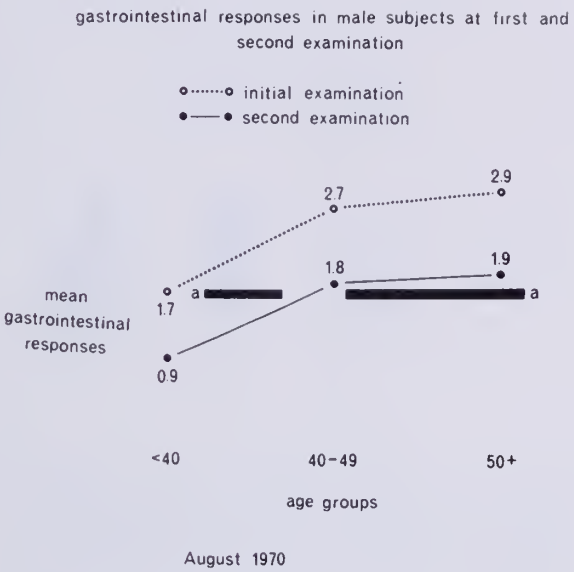


Figure 2. A comparison of age [on the abscissa] and reported gastrointestinal symptoms and signs [on the ordinate] at the first examination in the male [stippled bars] and female [black column] groups. On a mean basis, the scores rise with age only in the male group. However, there are no statistically significant correlations.

responses and the changes in the dietary habits. Table II summarizes the gastrointestinal scores at the second visit. As at the initial examination, the scores in both sexes rise with age. Unlike the findings at the first visit, the variance increases with age more in the male group. Unlike the observations at the start of the study, the relationship of age and gastrointestinal responses [Figure 3] is statistically significant only in the male group [$r = +0.229$, $P < 0.05$]. Finally, it is particularly noteworthy that the scores for both sexes are lower at the second visit than observed at the first examination.

The initial sample included 431 subjects. There were 156 participants in the follow-up visit. Many individuals shared in both examinations. Hence, to make the data more meaningful, a paired analysis was done for both visits [Table III]. The data indicate, on a mean basis, a marked reduction in gastrointestinal responses in both sexes at the second examination.

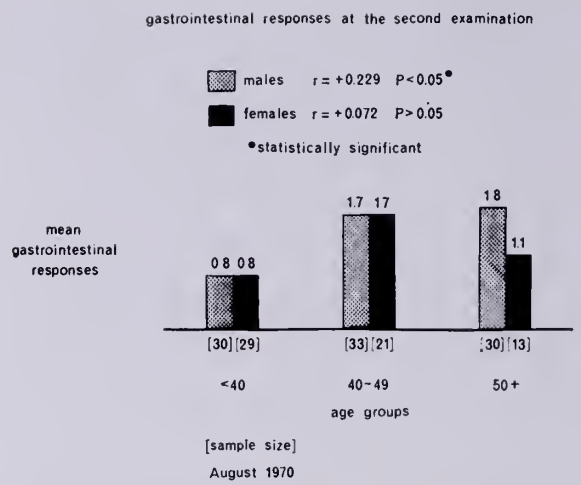


Figure 3. A comparison of age [on the horizontal axis] and reported gastrointestinal findings [on the vertical axis] at the second examination in the male [stippled bars] and female [black columns] groups. On a mean basis, the scores in both sexes rise with age. However, there is only a low but statistically significant correlation [$r = +0.229$, $P < 0.05$] in the male category.

Table III
gastrointestinal distribution
[paired analyses]

	age groups <40	40-49	50+
male group			
initial visit	[35] 1.7±2.1	[30] 2.7±2.7	[24] 2.9±2.5
second visit	[29] 0.9±0.8	[31] 1.8±2.3	[29] 1.9±1.8
female group			
initial visit	[30] 1.5±1.4	[17] 3.0±3.1	[11] 2.0±2.5
second visit	[27] 0.7±0.9	[19] 1.8±1.8	[12] 1.0±1.5

Discussion

It is well known that, with advancing age, there is an increase in symptoms and signs. This is generally regarded as the natural course of events [Figure 4]. What is usually not emphasized is that the variance also increases with age [Figure 4]. Thus, there are some older subjects with fewer gastrointestinal findings than some younger people. This suggests that, while it may well be *normal* [average] to display more gastrointestinal findings with time, it may not be *physiologic* [healthy].

The additional point is that the line depicting the natural sequence of events [Figure 5] can be altered. In some, the

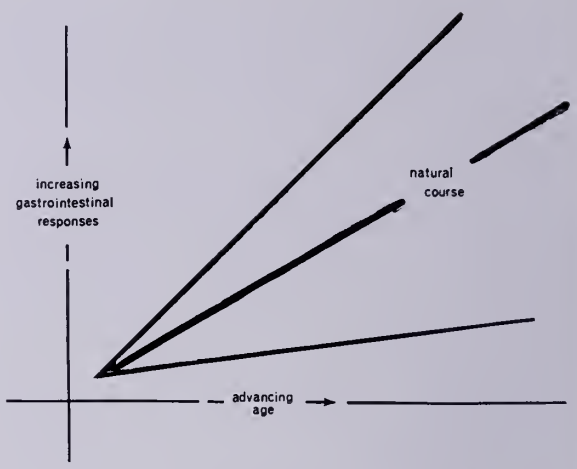


Figure 4. The relationship of age [on the x-axis] and reported gastrointestinal findings [on the y-axis]. On the average, with time, the scores rise. However, there is considerable variation [gray area] as shown by the fact that some older subjects have fewer findings than some younger people.

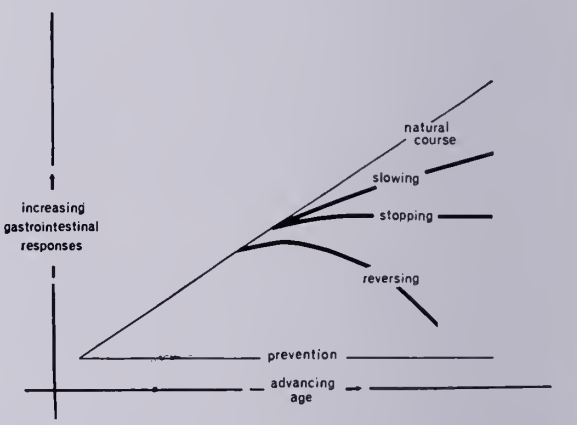


Figure 5. Present-day curative medicine attempts to alter the natural course of disease by slowing, stopping, or reversing the symptoms and signs. In a sense, this is secondary prevention [prevention of recurrence]. Primary prevention [prevention of occurrence] means to subtend an angle of zero.

clinical course can be slowed, in others probably stopped and, in some, possibly even reversed.

A comparison of the gastrointestinal scores before and after dietary counsel in male subjects earlier disclosed that, at both visits, the mean responses increased with age as did the variances. A closer look [Figure 6] indicates that, in the older group over 50 years of age at the follow-up visit, there was a

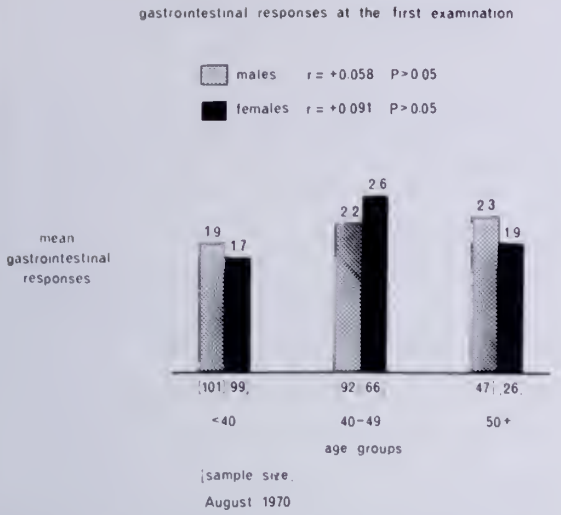


Figure 6. A comparison of the reported gastrointestinal findings before and after dietary counsel in male subjects. It is noteworthy [line a-a] that the mean gastrointestinal score for the 40-49 and 50+ age group after dietary counsel is about the same as the mean score for the <40 year group before dietary advice. Thus, referring to Figure 5, the process has been slowed.

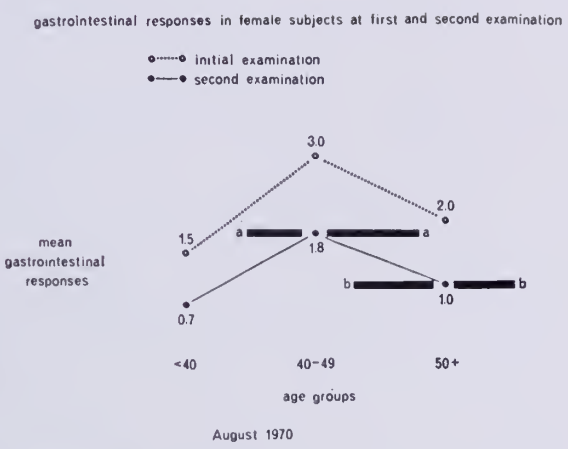


Figure 7. A comparison of the gastrointestinal scores before and after dietary counsel in female subjects. It is interesting [lines a-a and b-b] that the mean scores in the older groups after dietary counsel are less than the mean scores in the younger groups before dietary advice. Thus, referring to Figure 5, the process has been reversed.

mean gastrointestinal score of 1.9. It is noteworthy that, at the initial visit, a score of 1.7 was derived for the less than 40-year-old group. Thus, line a-a suggests that, within the limits of this study, the aging process has been *slowed* as pictured in Figure 6.

A similar analysis of the female group [Figure 7] shows essentially the same results with the possible exception the sequence of events has been *reversed* [line a-a] when compared with Figure 5.

One of the characteristics of the aging process is the progressive increase in symptoms and signs. Initially, and this is most prevalent in the younger years, the clinical findings are seemingly unrelated [Figure 1]. For example, there is a symptom in one organ system and a sign in another area. With time, the findings become more numerous and more concentrated in one or another system. Finally, the symptoms and signs crystallize, according to textbook descriptions, so that a diagnosis of a specific syndrome [e.g., arthritis, cancer, heart disease] is possible.

Clearly, the optimal point to interrupt the pattern is early during the amorphous incubation period. However, the evidence at this stage is subtle, and the changes can only be minimal.

The evidence presented in this report suggests the course of gastrointestinal disease can be altered early. The data offered here indicate that a stopping, slowing, or reversal in a clinical state can be effected [Figure 5] during the incubation period of chronic disease. It is particularly interesting that the changes made, in part, are possible through relatively simple dietary means.

The evidence presented in this report regarding gastrointestinal symptoms and signs parallels the earlier findings[1] for clinical symptoms and signs in general.

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New Honor Comes To Birmingham's Dr. Earle Conwell

H. Earle Conwell, M. D., widely known Birmingham orthopaedic surgeon, interested in Alabama's crippled children's program for more than a third of a century, has been appointed Consultant to the State Crippled Childrens Services, it is announced by Dr. O. F. Wise, director of Rehabilitation.

Dr. Conwell, who obtained his M. D. degree from the University of Alabama in 1915, served overseas in World War I under direction of the internationally known British orthopaedic surgeon, Sir Robert Jones, is a native of Walker County, where his hometown Oakland observed an "Earle Conwell Day" on the 45th anniversary of practice in Alabama. Friends and well-wishers honored him with a luncheon.

Currently Dr. Conwell is Associate Professor Emeritus of Orthopaedic Surgery, University of Alabama School of Medicine, a title that has been his since 1966, after 21 years of active professorship. He is a Life Counsellor of MASA and has been a member of the 50-Year Club since 1965. His new appointment will not interfere with his practice of orthopedic surgery.



DR. CONWELL

Dr. Conwell is the stepfather of Montgomery Probate Judge Perry Hooper.

A Case Report Of Perforated Jejunal Diverticulum

W. A. Webb, M. D. and J. C. Thoroughman, M. D.*

Opelika, Alabama

There are many interesting and bizarre causes of the acute abdomen. Case reports of these unusual conditions refresh the physician's memory, and reinforce his diagnostic acumen.

One of our recent cases was due to a ruptured jejunal diverticulum, an infrequent complication of an uncommon condition.

Case Report

E. H. (Lee County Hospital #80444), a 59-year-old white female was seen in the emergency room on October 19, 1969, five hours after the onset of sudden, sharp epigastric pain. She denied symptoms of peptic ulcer or other gastrointestinal disease. She was taking no medications.

On physical examination the abdomen was found to be slightly distended, and there was board-like rigidity. Rebound tenderness was generalized, but was more pronounced in the epigastric region. Bowel sounds were hypoactive. The temperature was 100 degrees F., and the pulse was 100 per minute.

The hematocrit was 46 per cent, and the white blood count was 8,800, 86 per cent of these being polymorphonuclear leucocytes in their segmented form. The flat film of the abdomen was normal, and there was no free air seen on the upright abdominal film.

A preoperative diagnosis of a perforated peptic ulcer was made. At surgical exploration the stomach and duodenum were normal, and no free fluid was present. In the first portion of the jejunum there was a two foot segment of intestine that had multiple diverticula on the mesenteric border. These ranged in size from a few millimeters to six centimeters in diameter. One of the largest diverticulum revealed a severe inflammatory reaction with a shaggy exudate and a small perforation. No other diverticula were present in the small or large bowel. The two foot segment of involved jejunum was resected, and intestinal continuity re-established.

The patient had an uneventful postoperative recovery.

Discussion

Since the purpose of this case report is solely to remind other practitioners that perforation of a jejunal diverticulum is one of the rare conditions requiring emergency abdominal surgery, no elaborate discussion is appropriate. Cooke and his associates, as well as Christensen, contributed excellent discussion of the problems arising from jejunal diverticula. Herrington has reviewed the 33 cases of perforation of these diverticula reported up to 1961. These three articles provide access to an extensive bibliography.

Jejunal pseudo-diverticula are estimated to occur in from 0.3 to one per cent of the population, and at times these remain asymptomatic only to be discovered at autopsy. By definition a pseudo-diverticulum does not contain all of the components of the intestinal wall, and the absence of effective musculature may be responsible for the retention of bowel contents and the ensuing pathology.

Complications may be chronic with mal-

From the Surgical Section, Medical Arts Center of Auburn-Opelika, Alabama.

*Former Chief of Surgery, Veteran's Hospital, Atlanta, Georgia.

absorption, peristaltic aberrations, "closed loop" macrocytic anemia, or microcytic hyperchromic anemia from chronic blood loss. Less than ten per cent require surgical intervention. Such complications include massive hemorrhage, chronic perforation with abscess and obstruction, or free perforation with peritonitis.

Free perforation is a rare complication of an uncommon condition, and has been reported less than fifty times. Multiple perforations have been reported. Although necrotizing inflammation is the most common cause of perforation, blunt trauma and foreign bodies are also etiologic factors.

Summary

The case history of a patient with perforation of a jejunal diverticulum is reported. Resection was performed and uneventful recovery followed.

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Medically Oriented Paragraphs

On Thursday, Sept. 3, 1970, the hurricane Celia swept through Corpus Christi, bringing most of the area's activities to a standstill. Exactly nine months later to the week, according to AMA news, births at Memorial Medical Center, Corpus Christi, more than doubled the customary, rising from 10 to 22.

Australian physicians want more money. They have formally petitioned the government (which provides some 90% of their income) for a 15% increase in fees.

Michigan has joined Ohio and California to make a trio of states now recognizing chiropractors by law, along with physicians, as providers of health care. The first two specify office, hospital, and home care for Blue Shield subscribers, while a California statute requires that Medi-Cal reimburse all providers including chiropractors, according to "Medical Economics." . . . And at the same time, AMA News quotes Richard S. Wilbur, M. D., deputy executive vice president of AMA, as labeling chiropractic a health hazard—an "unscientific cult" that endangers health and threatens life by delaying proper medical care.

Expressing the same view, the Oregon Medical Association's OMA Newsletter recently paragraphed the following: "The Alabama State Board of Health has been told by the Advisory Council for Comprehensive Health Planning in that state that chiropractic should be 'considered dangerous to health, discouraged, and eventually eliminated in the State.' They also urge the use of X-ray by chiropractors be stopped. Of 29 members of the Council, only four are MDs."

"Politics is too important to leave to the politicians," said Winton M. Blount, when president of the U. S. Chamber of Commerce, before he became Postmaster General, reports the Journal, Indiana State Medical Association.



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The Unwanted Child & Birth Control

Ten thousand battered children—a growing medical problem?

In his daily practice the physician witnesses the human suffering caused by uncontrolled fertility. Perhaps one of its most tragic effects is the unwanted child, who so often experiences parental rejection. The rejected child in a family may be neglected, nagged and severely punished. Sometimes he is criminally abused. Child abuse is common enough to have become a separate clinical entity: the "battered child" syndrome. Reliable statistics are difficult to obtain, but it has been estimated that in this country alone roughly 10,000 children are "battered" per year, and their number may be increasing.

A revealing picture of child abuse patterns is provided by one study of the American Humane Society. More than half of the 662 children involved (all reported in newspapers within a single year) were less than 4 years of age. One fourth of the battered youngsters died; most of these deaths were of children less than 2 years of age. Fathers were more often guilty of child abuse than mothers, but sometimes both parents participated. The study indicated that battered children are not limited to any particular socioeconomic stratum.

***For the complete brochure, and others in the series as they appear, please write to Searle or ask your Searle representative.** Explored in the forthcoming issues will be the history of birth control, the influence of poverty, ethnic factors and marital status, its role in illness, its genetic implications and its effects on the emotional and behavioral life of the individual.

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Special note — Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product The effectiveness of the sequential products appears to be somewhat lower than that of the combination products Both types provide almost completely effective contraception

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued

Indication — Ovulen and Demulen are indicated for oral contraception.

Contraindications — Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding

Warnings — The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4 4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs The long-range effect to the nursing infant cannot be determined at this time.

Precautions — The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives — A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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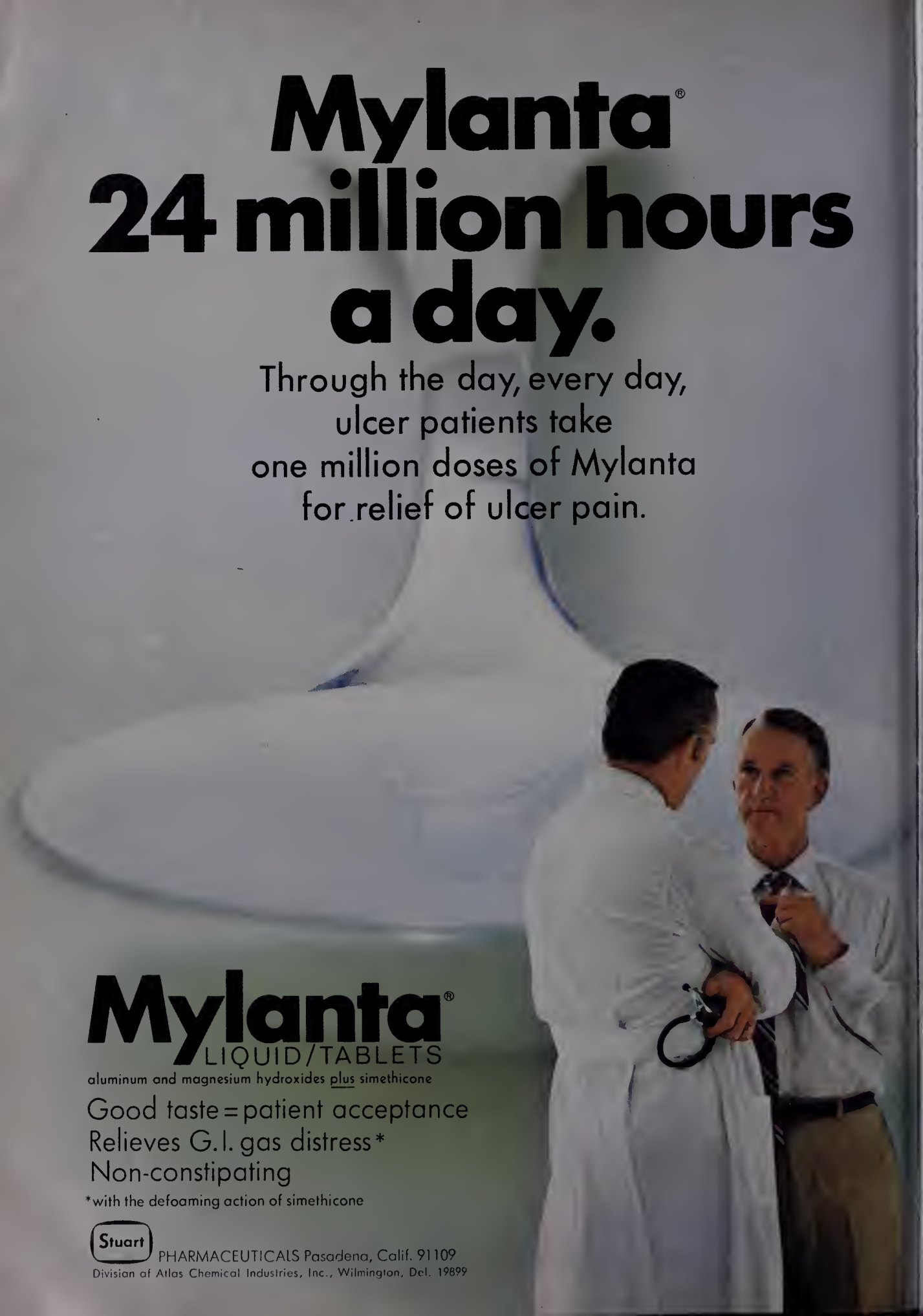
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Fathers and Sons in Medicine

A Doctor Came Out Of The Great Depression

It has been said that the finest compliment a son can pay his father is to follow him into his profession. And particularly may this be said of medicine.

John Allen Jones III did just that and (who knows?) the fourth of that name may, in time, become the third of that name with the earned degree of M. D.

The first of this trio arrived on Sunday, May 8, 1914, in Opelika, the son of an insurance man. Named for his father, he spent his childhood and teens in the town of his nativity, and was just months past his 15th birthday when the New York stock market tumbled. After high school he went first to Auburn for his baccalaureate and then to Emory for his M. D., earned in 1938.

The Great Depression was, at least in part, responsible for his exploring medicine as a career. "Knowledge is something no bank failure can deprive you of," his father told him, strongly recommending that he give some thought to medicine. Young Jones's intense interest carried him on from there.

From Emory young Dr. Jones went east for internship and residency, in turn to Knickerbocker Hospital, The New York Hospital (Cornell), and New York Eye and Ear Infirmary, in the meantime marrying Lucile Lewis, daughter of a Tuskegee pharmacist. They had met at Auburn, where she was earning her Bachelor of Science degree.

Came Pearl Harbor and Dr. Jones entered the service of his country, and they were on assignment to Buffalo, N. Y., when John Allen Jones III arrived on March 9, 1943. Shortly afterward, military duty took



John Allen Jones—III, M. D.; IV; II, M. D.

him to Greenland, where he was still serving at war's end.

Meantime, Allen III graduated from Lanier and impartially studied for one semester at Auburn and one at the University before going to Vanderbilt for his premed work and, like his father, to Emory for his M. D. He interned at Grady Hospital, Atlanta.

He is married to the former Frances Hardwich of Montgomery and they have two children, a daughter and John Allen Jones IV, the might-be doctor of a quarter of a century from now. This little family of four is scheduled to leave about the time the July issue of the Journal comes off the presses, headed for Okinawa and a 30-month tour of duty with the Army Medical Corps.

To return to the senior of this medical twosome, there are three daughters in the family: Laura Susan (Mrs. Tommy) Roberts, Louise (Mrs. R. W.) Shepherd IV, of Austell, Ga., suburb of Atlanta; and the

(Continued on Page 37)

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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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FATHERS AND SONS IN MEDICINE

(Continued from Page 34)

youngest, Martha Ann, a student at Mt. Vernon Junior College, Washington. The Shepherds have two little daughters.

When this appears, Dr. and Mrs. John Allen Jones, Jr., and Dr. and Mrs. William Beverly Virgin, may still be in Turkey. They were flying to Istanbul Saturday, June 26. Both doctors list travel as a favored hobby and the two couples frequently go together. They were in Mallorca and Madrid last year.

Dr. Virgin and his doctor son are expected to be the subjects of the August Journal's Fathers-and-Sons in Medicine.

On Pollution

A river is more than an amenity, it is a treasure.

—Oliver Wendell Holmes

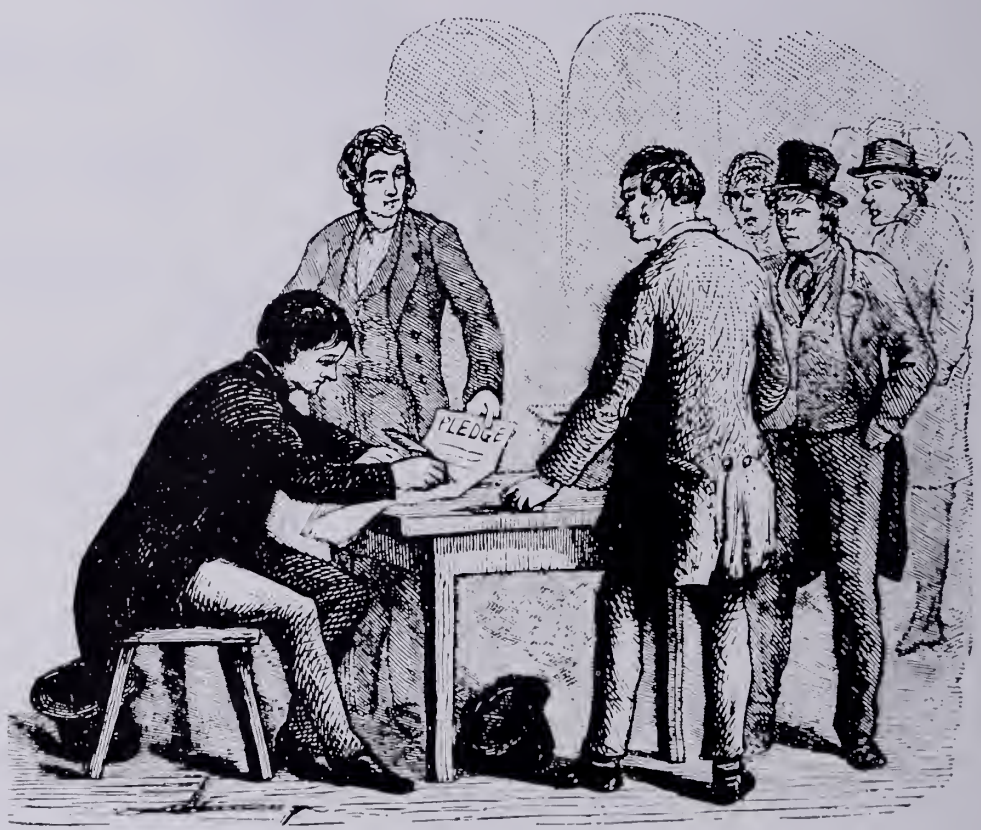
Effect Of "Pot" On Parents

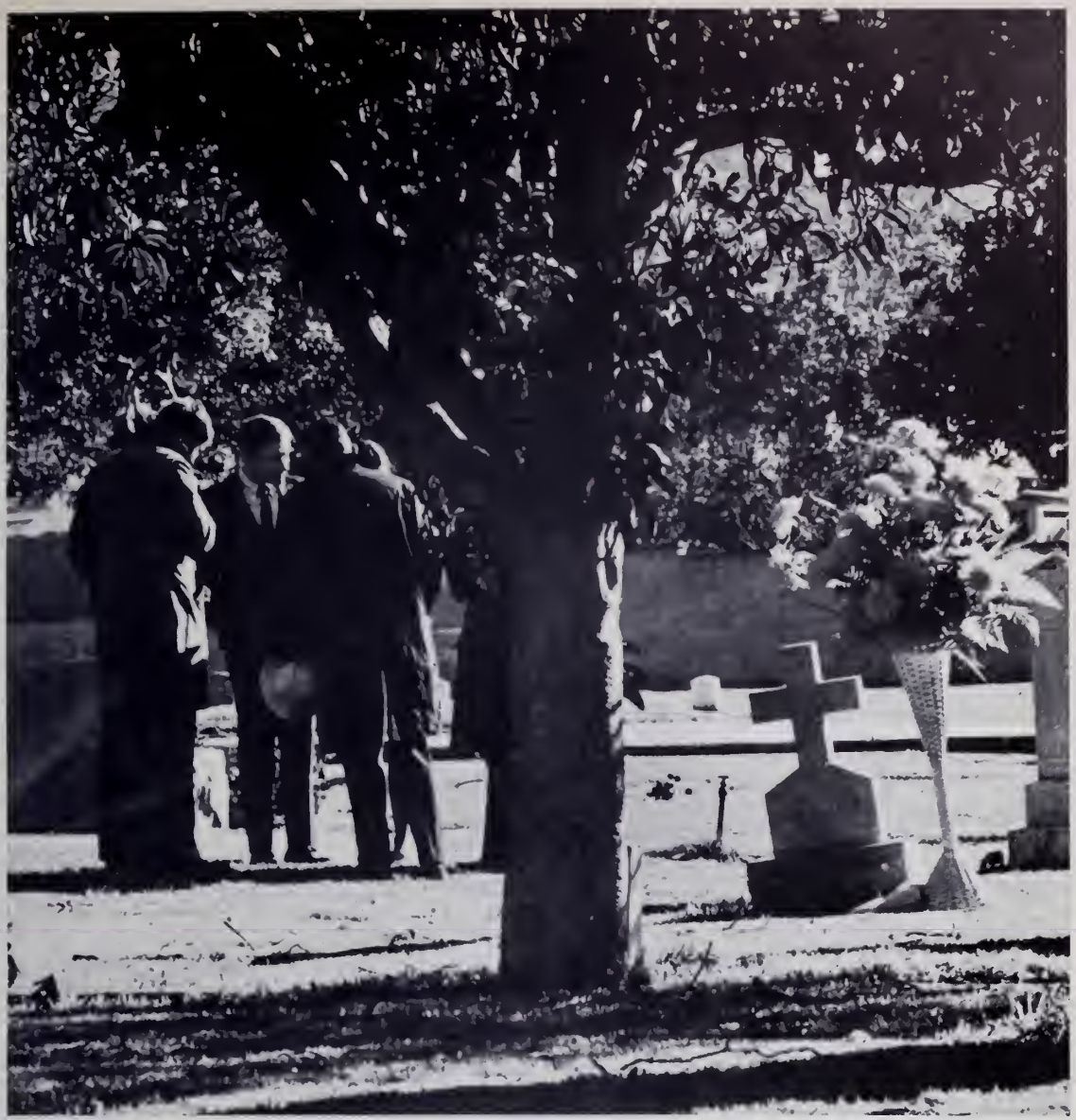
Parents are the greatest immediate concern of medicine in New York, according to an article reprinted in "California Medicine," which says:

". . . The most common presenting syndrome is alarmed, angry parents dragging in a child who has either been caught by them with some marijuana or has been 'busted by the fuzz.' . . . There have been dire threats of punishment. Parents frequently are terribly alarmed and angry and feel betrayed, and in this frame of mind may come in or be sent in for a psychiatric consultation." . . . The article by Jesse Schomer, M. D., New York City, concludes that "Adolescents need parents who can set standards and limits so they'll have something to rebel against."

In 1818, during the first session of the House of Representatives of the Territorial Assembly of Alabama, a Representative from Monroe County petitioned for legislation placing control of the medical profession in the hands of physicians.

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Drunk drivers bring families together.

In hospital rooms and at funerals.

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Call it what you will, it may be premalignant..

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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and Efudex® (fluorouracil) 5% cream can resolve it.

Call it actinic, solar or senile keratoses, many regard it as "precancerous."[1,2]

Topical fluorouracil, considered by some dermatologists to be a major advance in the treatment of multiple solar keratoses,[3,4] offers the physician a relatively inexpensive alternative to cryosurgery, electrodesiccation and cold knife surgery. Of the topical fluorouracils available, only Efudex offers 2% and 5% solution and 5% cream formulations—formulations that have proved effective in the treatment of these mutliple lesions.

Usual duration of therapy, 2 to 4 weeks.

Studies showed that with the 2% and 5% Efudex preparations, the usual duration of therapy was only 2 to 4 weeks.[5] Other studies with topical fluorouracil revealed that when concentrations of less than 2% were used, significant numbers of lesions recurred.[6]

Treats the lesions you can't see, too.

Numerous lesions, not apparent prior to 2% and 5% Efudex therapy, manifested themselves by definite reactions, while intervening skin remained relatively unaffected.[5] The early eradication of these subclinical lesions (which may otherwise have undergone further progression) probably accounts for the reduced incidence of future solar keratoses in patients treated with topical fluorouracil—especially with 5% concentrations.[6]

How to identify solar keratoses.

Typically, the lesion—a flat or slightly elevated brown to red-brown papule—is dry, rough, adherent and sharply defined. Multiple lesions are the rule.

Predictable therapeutic response.

The response to a typical course of Efudex therapy is usually characteristic and predictable. After 3 or 4 days of treatment, erythema begins to appear in the area of keratoses. This is followed by a moderate to intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of this response generally occurs two weeks after the start of therapy and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. Lesions that do not respond should be biopsied.

References: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, Lane & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T, and Honeycutt, W. M.: "Treatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *Pharmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, p. 92. 3. Belisario, J. C.: *Cutis*, *6*:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, *97*:14, 1968. 5. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and Lavin, E.: *Cancer*, *25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

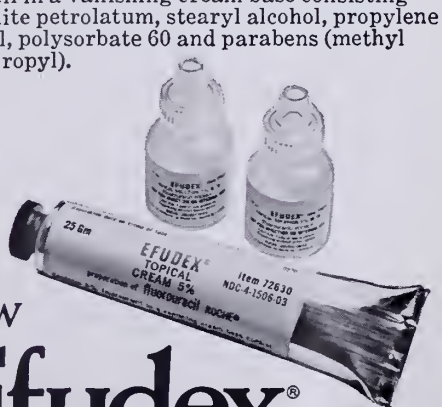
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



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Congenital Anomalies In Alabama

Peter B. Peacock, M. D., D. P. H.*
John W. Simpson, M. D.***
Charles A. Alford, Jr., M. D.**
Frank Saunders****

For many years, in the State of Alabama, facilities have been provided by private physicians, and by state agencies, particularly the State Crippled Children's Service, for the treatment of individuals with birth defects. As time went on, it became evident that a need existed for a specific place from which answers could be provided to the many problems which arise when a crippling handicap occurs in a family. Where can immediate diagnosis and treatment be provided? What facilities are available for the long after-care that is often required? How can continued follow-up be provided so that the physicians can be aware of the therapeutic and training aids which are at their disposal? How can physicians be informed repeatedly of these possibilities, so that when a patient with such a defect is presented the doctor will be able to give assurance to the family that he has, at his disposal, all the procedures that the patient will require in efforts to develop his full potentials for successful participation in useful family and community life? Furthermore, the physician will greatly enhance the doctor-patient relationship by being able to give this assurance of his own interest, and his knowledge of full services required for the child's care.

In an effort to answer these needs, the National Foundation, in collaboration with the department of Pediatrics of the UAB School of Medicine, has established an Information Office in the Birth Defect Center in Birmingham. It is the purpose of this office to provide the doctors of the state with the location and procedures for admissions to the clinics of the state services; with the location of private physicians who are interested in treatment of various defects; with therapeutic and special education facilities for prolonged restoration of the child; with sources of financial assistance which may

(Continued on Page 44)

*Professor and Chairman, Department of Public Health and Epidemiology.

**Meyer Professor of Pediatric Research.

***Coordinator, Information Office, Birth Defects Center.

****Computer Programmer.

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The residential care unit is composed of 26 private rooms with private baths convenient to a comfortable lounge and arranged to achieve an intimate home-like atmosphere. All living units are individually decorated and furnished. No two are alike. Wall to wall carpet throughout.

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The Willingway treatment program operated successfully at another location in Statesboro for four years before moving to the new facility.

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Medical Director

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(Continued from Page 42)

TABLE I

CONGENITAL ANOMALIES REPORTED AT BIRTH
IN ALABAMA : JULY 1969 - NOV. 1970

Malformation	ISC No. (8th Rev)	Numbers and Rates per 1,000 Births				
		W Male	NW Male	W Female	NW Female	Total
Anencephalus	740	5 (.2)	0	4 (.1)	2 (.1)	11 (.1)
Spina bifida	741	26 (.8)	5 (.3)	55 (1.9)	3 (.2)	89 (1.0)
Cong. hydrocephalus	742	8 (.3)	1 (.1)	10 (.3)	2 (.1)	21 (.2)
Other of CNS	743	1 (-)	1 (.1)	4 (.1)	1 (.1)	7 (.1)
Anom. of eye	744	4 (.1)	0	3 (.1)	1 (.1)	8 (.1)
Anom. of ear, face, neck	745	9 (.3)	2 (.1)	6 (.2)	0	17 (.2)
Anom. of heart	746	28 (.9)	4 (.3)	16 (.5)	6 (.4)	54 (.6)
Other of circ. system	747	0	0	1 (-)	0	1 (-)
Anom. of resp. system	748	7 (.2)	0	0	2 (.1)	9 (.1)
Cleft palate and lip	749	66 (2.1)	7 (.5)	33 (1.1)	12 (.8)	118 (1.3)
Other of upper alim. tract	750	9 (.3)	1 (.1)	4 (.1)	1 (.1)	15 (.2)
Other of dig. system	751	11 (.3)	3 (.2)	11 (.4)	1 (.1)	26 (.3)
Anom. of genital organs	752	70 (2.2)	13 (.9)	3 (.1)	1 (.1)	87 (1.0)
Anom. of urinary system	753	5 (.2)	1 (.1)	2 (.1)	0	8 (.1)
Clubfoot	754	66 (2.1)	21 (1.4)	38 (1.3)	5 (.3)	130 (1.4)
Polydactyly	755.0	21 (0.7)	67 (4.5)	15 (0.5)	58 (3.9)	161 (1.8)
Other of limbs	755.1-9	50 (1.6)	26 (1.7)	36 (1.2)	27 (1.8)	139 (1.5)
Other of musc. skeletal sys.	756	8 (.3)	0	4 (.1)	2 (.1)	14 (.2)
Amon. of skin, hair nails	757	2 (.1)	0	3 (.1)	1 (.1)	6 (.1)
Other and unspecified	758	1 (-)	0	1 (-)	2 (.1)	4 (-)
Multiple systems	759	13 (.4)	4 (.3)	21 (.7)	5 (.3)	43 (.5)
TOTAL		410 (12.9)	156 (10.5)	270 (9.2)	132 (8.9)	968 (10.6)

be available. Questions about these matters from parents and agencies are also answered. Obviously, there can be no one "clinic" which would be able to care for all birth defects, so the multitude of questions which have to be answered, and the number of the questions from over the state is additional evidence for the need of such an information office. This one, in Alabama, is one of two or three in the nation at the present time.

In addition to supplying the above information to physicians and laymen, a statewide file by counties is kept of all birth defects reported each month to the Bureau of Vital Statistics. These are reported to the Health Office in the counties, and increasing efforts are being made to secure from each county nursing office a report on the type of care being received by each child. These reports are not complete, but improvement is slowly being made. All of this information is filed in a computer in the School of Public Health, University of Alabama School of Medicine. They are then available for statistical review and analysis, an example of which follows.

Our findings are based on congenital anomalies which have been reported in Alabama over a 17-month period (July 1969—November 1970). Records were received covering 932 newborns with 968 anomalies. During

(Continued on Page 48)

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Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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and the Latin **sedatus,**
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KINESED®
antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

(Continued from Page 44)

the period there were approximately 90,900 births recorded in the State of which some 31,700 were white males, 29,400 were white females, 14,900 were Negro males, and 14,900 were Negro females. The overall rate of 10.3 newborns with anomalies per 1,000 births determined through a birth registry is comparable with the findings from similar registries elsewhere.

A breakdown by type of malformations, race and sex is given in Table I. The white rate for anomalies (11.1 per 1,000) was higher than the non-white rate (9.7 per 1,000), but how much of this was due to under-notification of congenital anomalies among non-whites is difficult to determine. It is notable that for Jefferson County where the notification of anomalies among non-whites might be expected to be optimal almost exactly the same racial disproportion was found. This racial difference is markedly increased if polydactyly (I.S.C. 755.0) is excluded (36 whites and 125 negroes) leaving a residual rate of 10.5 per 1,000 for whites and only 5.5 per 1,000 for non-whites. The only other reasonably common anomaly (more than 5 cases) for which there was a relative non-white excess was "other anomalies of the lower limb" (I.S.C. 755.7) with 20 whites and 24 Negroes.

Except for congenital anomalies of the genital organs (I.S.C. 752) where there is the expected male excess, differences by sex are not very striking. Among both whites and Negroes, clubfoot is approximately twice as common among males. For whites only, anomalies of the heart (I.S.C. 746) and cleft palate and lip (I.S.C. 749) are more common among males (this latter difference is statistically significant at $p < .01$), while spina bifida (I.S.C. 741) is significantly ($p < .01$) more common among females.

Within the State there are concentrations of certain defects in defined geographical

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areas (Counties). For each area and each abnormality the standardized deviation (DEV) where $DEV = \frac{\text{observed - expected}}{\sqrt{\text{expected}}}$ is approximately a standardized normal deviate (Hill et. al., 1968). Applying Yates' correction for continuity to this (because of the small numbers involved in many instances) we get $DEV(c) = \frac{|0 - E| - \frac{1}{2}}{\sqrt{E}}$.

In Alabama we are looking at 67 counties at once and the probability is less than 0.05 that any one county will yield a DEV (c) of 3.34 or larger if the abnormality concerned is distributed randomly. (Note that $0.999235^{67} = 0.95$, and 3.34 standard deviations in a normal distribution covers 99.93% of observations). To demonstrate how this calculation works, let us consider the incidence of anencephalus in Calhoun County. Four of the nine cases of anencephalus among whites in the State occurred in this one county. 3.68% of the white births in the State were from the county so the "expected" number of cases of anencephalus was 9 x 0.0368 = .3312. $DEV(c) = \frac{4 - .8312}{\sqrt{.3312}} = 5.50$ which is statistically significant at $p < .05$.

Those counties for which concentrations of specific anomalies departed significantly ($p < .05$) from random were as follows:

Knowledge of these concentrations obviously provides the opportunity for directed genetic and environmental studies.

One disadvantage of birth registry studies is the number of cardiovascular anomalies notified for which a precise diagnosis awaits a more careful work-up. Thus, in our series, of the 54 anomalies notified, 40 fell into the unspecified sub-group (I.S.C. 746.9) making any incidence-estimate of the more specific anomalies meaningless.

Discussion

Studies on the incidence of congenital anomalies in children give figures varying from 7.4 (Hendricks, 1955) to 75.4 (McIntosh et. al. 1954) per 1,000 depending on the population concerned, on which anomalies are included and searched for, on whether the authors have personally examined all births or relied on some sort of notification system, and on whether the children concerned have been followed prospectively for some years or not. Both registries similar to the Alabama registry have given similar results. Thus (Stek et. al., 1969) in Omaha-Douglas County from 1955 through 1966 there were 1,485 congenital anomalies in 103,165 births for a rate of 14 per 1,000. In Pennsylvania (Ivy, 1968) from 1961 to 1965 there were

Defect	ISC No.	County	Ethnic Group	Observed Number	Expected Number	DEV (c)
Anencephalus	740	Calhoun	White	4	.3312	5.50
Spina bifida	741	Henry	White	3	.2540	4.46
		Butler	White	3	.3386	3.71
Anom. of heart	746	Dale	White	5	1.0422	3.39
Cleft palate and lip	749	Calhoun	Negro	3	.3899	3.38
Anom. of gen. organs	752	Jefferson	White	26	11.9010	3.94
Clubfoot	754	Coffee	White	6	1.3591	3.55
		Dale	White	11	2.4636	5.12

13,601 congenital anomalies reported among 1,089,695 live births for a rate of 12.5 per 1,000. Special populations such as the adopted-child population described by Dumars (1967) with a rate of 193 per 1,000, may have much higher rates.

Ethnic differences may be marked. Negro populations, whether studied in Pennsylvania (Ivy, 1968), Nigeria (Gupta, 1969), Putoria, South Africa, or Birmingham, England, show the same excess of polydactlyly and relatively fewer neural tube deficits and oral clefts (Stevenson et. al. 1966., Leck, 1969) that emerge from our Alabama study. This difference is believed by most investigators (Leck, 1969) to be "probably due mainly to genetic differences". In contrast, the lower rate of neural tube deficits described among Indians in India (Master-Notani et. al., 1969) may be largely environmentally determined since Indian populations in England have rates closely approaching the Caucasian pattern.

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Each morning look back upon your work of yesterday and then try to beat it.

—Sheldon

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THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



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WARNING: Do not give in advanced kidney or liver disease. PRECAUTIONS: Trocinate relaxes all smooth muscles. Large dosage or prolonged usage may cause feeling of weakness or can theoretically precipitate gall-bladder colic, due to relaxing the vascular and duct systems. Caution should be observed in patients with urinary bladder obstruction. DOSAGE: 400 mg. May be repeated in 4 hours. After relief, lengthen the dose frequency. (see side note)

NOTE: *The high therapeutic index of Trocinate permits its administration in dosage sufficient to relieve smooth muscle spasm promptly. 400 mg. dosage usually creates a therapeutic blood level. In reducing dosage after relief, lengthening the time between dosage rather than lessening the recommended dose is preferable. The prompt direct action allows a consciousness of the first suggestion of return of symptom . . . a guide to dose spacing and to determining when treatment is complete. A prescription for twelve or sixteen 400 mg. tablets will usually correct spasm and leave a few tablets for a reserve.*

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Alabama Department of Public Health

Ecology Of Health

Ira L. Myers, M. D.
Montgomery, Alabama

The essentials of life for primitive man have been said to include food, shelter, and clothing. In recent years we have added a fourth item, medical care. This was described as a need and more recently has been acknowledged as a right. The fifth item has been added by many under the term "a livable environment." This shift of emphasis to ecology, or a study of our home, includes the essentials of clean air, clean water, and healthy surroundings. The term "tolerable environment" may be a shift toward enhancement of these factors that have been allowed to degrade to unacceptable levels in many areas.

Definitions of terms such as acceptable, tolerable, critical, hazardous, and dangerous have wide variations by persons, geography, and points of view. We now publicly recognize dangers and hazards not previously acknowledged. We are also able to measure these factors more accurately.

In this day of the ecologists, we are interested in the control of our environment in every aspect.

The "Now" generation is interested in an "action" program and improving the environment. Ecology is one area of health where the action is "at." It's appropriate that the youth of our nation are interested in preserving our environment, enhanching our living conditions, and correcting errors of the past.

Not long ago public health was considered ahead of its time and was also pushing for environmental controls. These efforts have played a major role in the prevention of many infectious diseases. While we have been busy "doing our thing" and completing the job or holding the line in disease control activities, the people have begun running ahead to urge more and greater efforts.

At the APHA meeting in Buffalo, N. Y., several years ago, I recall Dr. George James making a comment to the effect, "The people are in the streets; we must find out where they are going for we are their planners and leaders."

In this push the public demands more medical care and more prevention. Comprehensive Health Planning and the Regional Medical Program came into existence the same year and began running in parallel. Comprehensive Health Planning was more directed toward funds for public agencies and increasing facilities and services and involving the consumer in the analysis of health needs. The Regional Medical Program was more educationally oriented, involving the medical schools and helping to promote continuing education and research in the delivery of special services for heart, cancer, stroke, and related diseases. Closer coordination of these interrelated efforts are indicated in many parts of the country.

Recently, in a national meeting where we

Presidential address of Ira L. Myers, M. D., President, Southern Branch, American Public Health Assn., Memphis, Tennessee May 20, 1971.

were struggling with the health manpower shortage and the needs for more educational and training funds for the health professions, I kept hearing the word "more"—more people—more numbers—more varieties of persons to render services. I received the distinct impression that quality of care was forgotten in favor of quantity. This could be disastrous. A mediocre health performance is wholly insufficient and inadequate to meet the needs of today's demands. Properly trained health professionals are essential to meet the task. Coordination of efforts is also required if maximum effect is to be achieved without duplication.

Dr. Ben Freedman of New Orleans has been the nation's foremost exponent of unification of health functions in the official agencies. His fight against fragmentation is rooted deep in basic principles of government and prevention of duplication of public effort. Consolidated and coordinated health efforts can work and will work efficiently only if directed by strong leaders, adequate and loyal staff support, and proper financial support from an interested public.

The disruption in health administration has been proceeding at a quickened pace as we have gloried in our past instead of pressing forward to the future.

In spite of our tremendous successes, we have failed to keep current, to keep the public informed and stimulated, and to present a lively image. Our efforts have been dwarfed by spectacular advances in clinical areas.

Some of our most successful efforts have been through the community or mass application of individual medical principles such as syphilis control, T. B., prophylaxis, immunizations, family planning, food and water sanitation, fortified foods, tobacco educational efforts, and drug abuse education. You could add to this list of successes, but at the same time we are proliferating our activities and efforts, we have been adding to the troops—at the same time losing our cadre.

(Continued on Page 58)

Brief Summary of Prescribing Information–9-9/22/69. For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
Usual Dose: 1 tablet b.i.d.
Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®
hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

BRISTOL
BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

The antihypertensive therapy that is easy to live with.*

When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.



It's working, even when she's not.



10:30 p.m. To bed with tablets or suspension. Either dosage form of Gantanol® (sulfamethoxazole) provides reliable therapy for nonobstructed cystitis.

The convenient *b.i.d.* schedule lets the patient rest assured—while Gantanol fights the infection.

1:30 a.m. Antibacterial blood and urine levels build fast. Peak therapeutic effectiveness starts within 2 to 3 hours of the initial dose.

In addition, Gantanol diffuses readily into interstitial fluids for antibacterial activity at the foci of the infection.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient indi-



4:30 a.m. Effective through the night. Each dose of Gantanol (sulfamethoxazole) delivers up to 12 hours of antibacterial action against susceptible pathogens, such as *E. coli, Klebsiella-Aerobacter, S. aureus* and others. Action all day. And action all night to prevent retained urine from becoming the medium for bacterial proliferation.

7:30 a.m. With a built-in margin of protection. Gantanol *b.i.d.* therapy means rapid symptomatic improvement, often in 24 to 48 hours, for most patients with nonobstructed urinary tract infections.



in nonobstructed urinary tract infections

Gantanol® B.I.D.
(sulfamethoxazole)

Tablets/Suspension

12 hours of therapy with every dose

viduals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

(Continued from Page 54)

With the advent of the medical care emphasis, our eyes have been diverted from our main purpose of primary prevention of disease, and the financial support has shifted to the dramatic urge to meet the needs of the ill and injured.

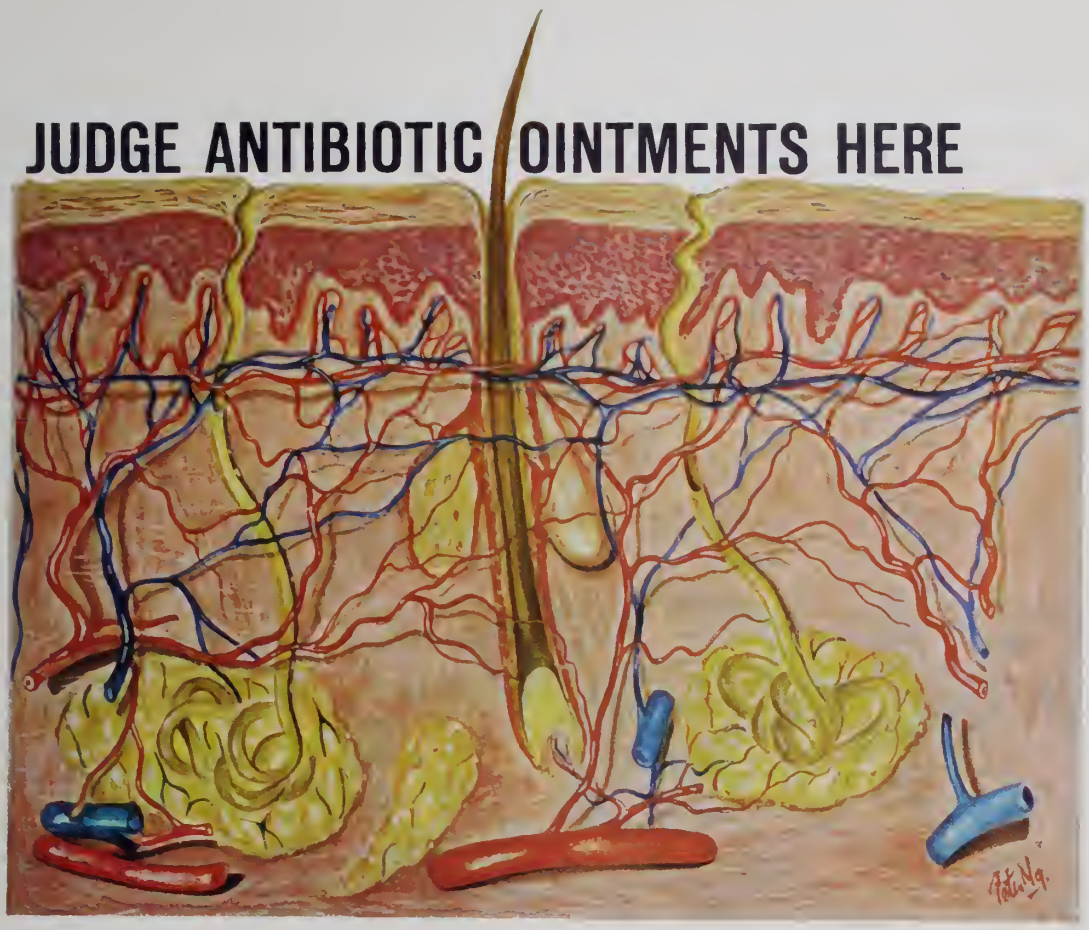
The frustration of official agencies to provide basic services in prevention has appeared to the majority as a lack of interest in medical care programs. This misunderstanding coupled with welfare activities for treatment for masses of the infirmed, has compounded the problems. These changes have affected the cadre of health professionals in federal service by repeated reorganization of the federal health establishment and dissipation of manpower through change and uncertainty of goals. This loss of experienced health professionals has extended to state and local agencies. Consequently, the grass roots and even the very foundations of a stable health structure are shaken. Even the organization of the national voluntary professional health organization has suffered a drastic and complete reorientation. I refer to the new APHA, our parent organization. Events of the next few years and subsequent history will record whether this abrupt change was the wisest course of action to influence and assure a primary prevention effort which will net the most beneficial effects to the masses at the taxpayers' level of tolerance.

I admit my bias when I note the fiasco of Medicaid, which was spawned in a welfare atmosphere without the advice, counsel, and assistance of health professionals at all levels. I note the ineffectiveness of health efforts by economists. I am presently concerned by difficulties encountered by the Department of Justice with the new Con-

(Continued on Page 65)



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Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

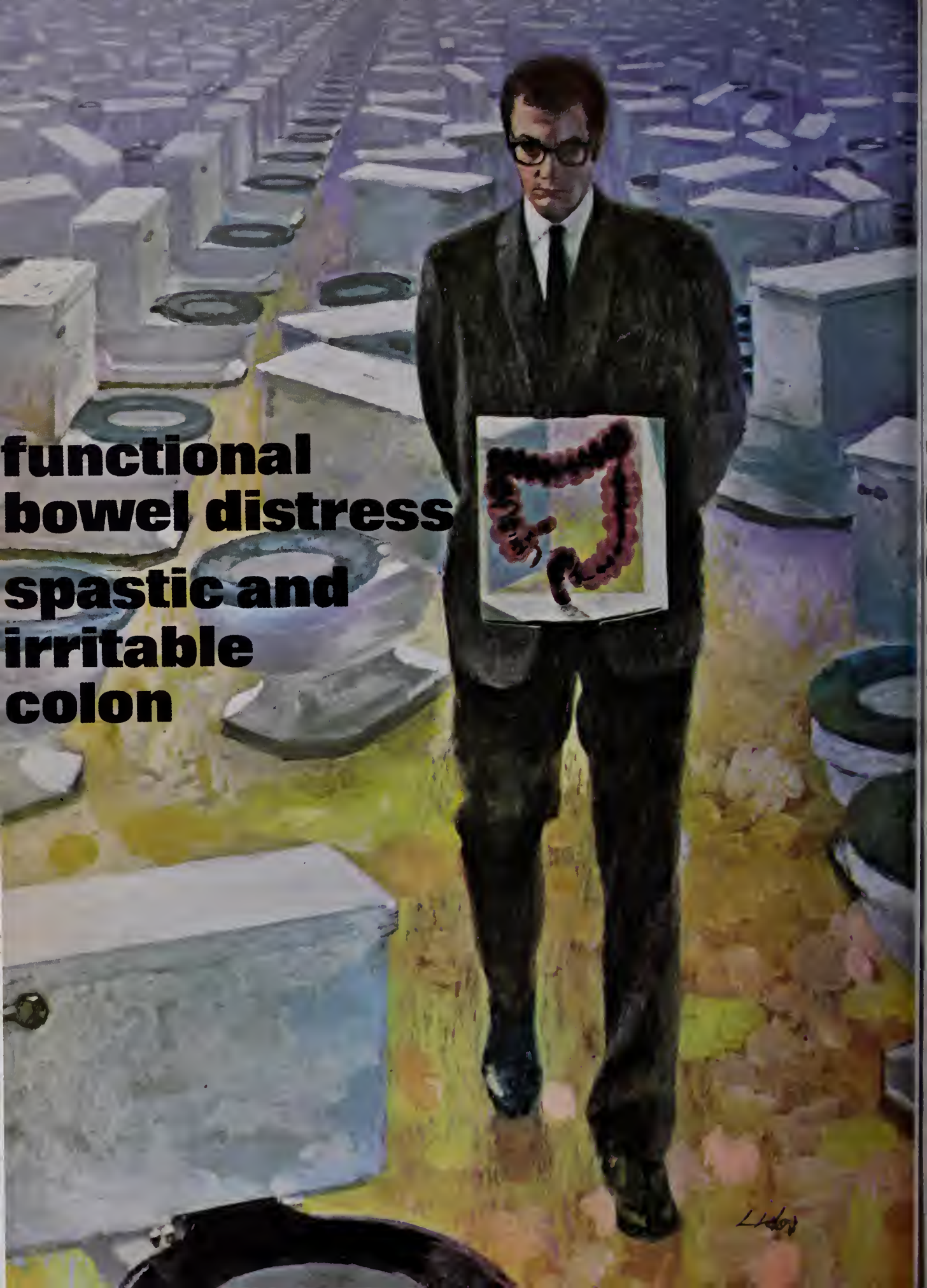
Complete literature available on request from Professional Services Dept. PML.

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functional
bowel distress
spastic and
irritable
colon

move up to "the Robinul response"

when lower G-I symptoms demand a potent synthetic antispasmodic

In treating hypermotility associated with functional lower G-I disorders are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent antispasmodic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of hypermotility, making it a highly effective agent in functional bowel distress, as well as in spastic and irritable colon. Robinul Forte also exerts a more selective action on the gastrointestinal tract. If the patient has a "one tract mind" concerning his lower G-I symptoms, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2 mg. Forte (glycopyrrolate)

■ **INDICATIONS** Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily indicated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with acute episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities available, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recommended in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm; (2) gastric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic pancreatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure syndrome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital may be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient glaucoma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving 1 to 32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this. Blurred vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic drugs include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one tablet three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual patient's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum required to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved AHR/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue tablets engraved AHR/2 in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va. A·H·ROBINS



The all-day, all-night summer cold and allergy pill.

Novahistine LP can give your patients the convenience of twice-a-day dosage—morning and bedtime—along with prompt relief from the symptoms of allergic rhinitis, hay fever or summer colds. These continuous-release tablets contain a vasoconstrictor-antihistamine formulation that goes to work rapidly and lasts for hours. Even when nasal congestion is the result of repeated allergic episodes, patients can usually enjoy around-the-clock relief. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

DOW THE DOW CHEMICAL COMPANY, Rx Pharmaceuticals, Indianapolis

Novahistine® LP decongestant

(Each tablet contains 25 mg. of phenylephrine hydrochloride and 4 mg. of chlorpheniramine maleate.)

when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.

Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.

Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

Supplied *Tablets: 2 mg.*, scored—bottles of 100./*5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.

For additional product information, see your Upjohn representative or consult the package circular.

Upjohn The Upjohn Company, Kalamazoo, Michigan

UA68-7627-R MED 8-5-5 (LQX)

(Continued from Page 58)

trolled Substances Act. This appears to be an excellent effort to place in order and update an archaic growth of narcotic and dangerous drug laws that have been enacted over the years.

I hope that problems in implementation and communicating the intent, provisions, and impact of this law to the medical community won't result in unjustified resistance and criticism. Adequate communication is essential between this enforcement and regulating legal agency and the physicians, dentists, veterinarians, and pharmacists, who are held responsible for the law's proper and safe utilization in the relief of suffering, as well as the prevention of drug abuse to a great degree.

Everywhere we turn communication is our most urgent health need. Our services as public health servants are needed. We must do our best in the delivery of rehabilitative services and assistance with the salvage of those who suffer from injury or illness, but our goal must be primary prevention because this is economic wisdom.

The ecology of health demands a careful study of the home environment as it comprises the community. The total needs of the host, man, demand a coordinated effort by everyone interested in human health and welfare to provide a continuum of protection against a myriad of offensive factors. The team of health workers and consumers must balance dangers and risks, desires and possibilities, work and workers, money and men, efforts and effects to provide the enjoyable symbiotic relationship with our environment we have come to know as ecology.

The ecology of health is prevention oriented and is a high service to mankind because it avoids the costly agonies of disease and disability. It offers instead preferred stock in Positive Health, continued dividends in the pursuit of happiness, a policy of wise use of our resources of the present, and preserves for posterity our investment in the future.

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. . . with 171 handsome rooms designed for your comfort and convenience. A center-of-everything location including Birmingham's University of Alabama Medical Center . . . making The Guest House a favorite of Doctor's wives and in-town outpatients. Superb dining, dancing and nightly entertainment. Come stay with us often.

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"Where the Action Is!"

How Half Truths Hurt

What half truths can do to medicine's image is heavily underscored in the following Washington-datelined news item out of the Chicago Daily News:

"The medicare premiums paid monthly by 19.5 million aged persons to cover doctor bills will increase 30 cents to $5.60 a month July 1, federal officials said Wednesday.

"Most of the increase is necessary to meet the rising costs of physicians' fees," the Health, Education and Welfare Department said. The increase also will cover a greater use of doctors' services among the elderly.

"Premiums paid by the elderly go into a trust fund used to reimburse doctors for their services under medicare, a health insurance program for persons 65 and older. By law, HEW must adjust the premium annually to keep the fund in balance. The monthly premium is matched by the federal government from general revenues."

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A DIVISION OF THE DEPARTMENT OF PSYCHIATRY OF DUKE UNIVERSITY
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Complete facilities for evaluation and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, music therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

High school facilities for a limited number of appropriate patients are now available on grounds. The School Program is fully integrated into the hospital treatment program and is accredited through the Asheville School System.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

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Associate Professor of Psychiatry and Medical Director

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This is a typical "case history" of one new drug—or, rather, a proposed new drug—assembled for submission to the U.S. Federal Food and Drug Administration. These volumes are the result of several years' work by thousands of professional and skilled personnel in just one pharmaceutical company's research laboratories, and by hundreds of physicians in medical schools, hospitals, and private practice. They cover every aspect of experience with this proposed new agent from chemical laboratory to clinic, from mouse to man. Each volume could conceivably represent hundreds of thousands of dollars of financial investment, countless hours of human effort. This veritable mountain of data stands behind every new agent offered to you by pharmaceutical manufacturers—a reassuring testimonial to the efficacy, safety and purity of the drugs you will prescribe today to lower the cost of disease to your patients.

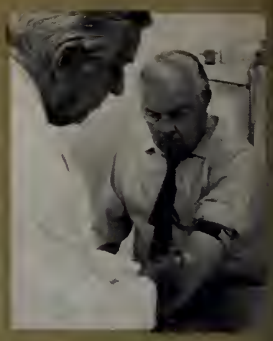
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This message is brought to you as a courtesy of this publication on behalf of the producers of prescription drugs.

in stable adult diabetes, if diet alone fails...



start with DBI®-TD (phenformin HCl)

timed-disintegration capsules 50 mg.

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a biguanide... not a sulfonylurea

Lowers elevated blood sugar without increasing endogenous insulin secretion.

Probably, secondary to its hypoglycemic effect, decreases insulin oversecretion. This may help to reduce lipogenesis and facilitate lipolysis, which may account for the clinically reported loss of excess body weight and lowering of elevated serum cholesterol levels in overweight, hypercholesteremic, stable adult diabetics unresponsive to diet alone.

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(phenformin HCl)
timed-disintegration capsules 50 mg.

lowers elevated blood sugar

How to prescribe DBI®-TD (phenformin HCl)

To start with DBI-TD

Week 1 1 capsule with breakfast may be effective, or a second capsule may be given with the evening meal.

Week 2 Continue effective DBI-TD dosage.

If necessary, add an additional capsule to the A.M. or P.M. dose.

Thereafter Continue effective DBI-TD dosage.

To transfer from sulfonylurea therapy to DBI-TD alone: The first week, withdraw sulfonylurea; start with DBI-TD as indicated in the chart.

To transfer from sulfonylurea therapy to combined therapy with DBI-TD: The first week, continue dosage of sulfonylurea; add DBI-TD as indicated in the chart. When effective regulation of diabetes is attained, sulfonylurea may be reduced and/or withdrawn.

ndications: Stable adult diabetes mellitus; sulfonylurea fail-res, primary and secondary. **Contraindications:** Diabetes mel-itus that can be regulated by diet alone; juvenile diabetes that s uncomplicated and well regulated on insulin; acute compli-ations of diabetes (metabolic acidosis, coma, infection, gan-rene); surgery; severe hepatic disease; renal disease with remia; cardiovascular collapse, after disease states associated vith hypoxemia. **Warning:** Use during pregnancy is to be avoided. Until adequate data on the effects of DBI on the human fetus re available, such use can be considered experimental. **Pre-autions: Starvation Ketosis,** which must be differentiated rom "insulin lack" ketosis, and is characterized by ketonuria n spite of relatively normal blood and urine sugar, may result rom excessive DBI therapy, excessive insulin reduction or nsufficient carbohydrate intake. Adjustment of DBI-TD or nsulin dosage, or supplying carbohydrates, alleviates this tate. DO NOT GIVE INSULIN WITHOUT FIRST CHECKING BLOOD AND URINE SUGARS. **Lactic Acidosis:** DBI is not rec-mmended in the presence of azotemia or in any clinical situa-ion that predisposes to sustained hypotension that could lead o lactic acidosis. To differentiate lactic acidosis from ketoacido-is, it is recommended that periodic determinations of ketones in the blood and urine be made in diabetics previously stabilized on DBI, or DBI and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. DBI should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. **Hypoglycemia:** Although hypoglycemic reactions are rare when DBI is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with DBI. **Adverse Reactions:** Principally gastrointestinal, occurring more often at higher dosage levels; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, DBI should be immediately withdrawn. Although rare, urticaria and gastrointestinal symptoms following excessive alcohol intake have been reported. **Dosage:** 1 to 3 DBI-TD 50 mg. capsules daily. **FSN 6505-724-6331. Also Available:** DBI tablets 25 mg. **Supplied:** Bottles of 100 and 1000.

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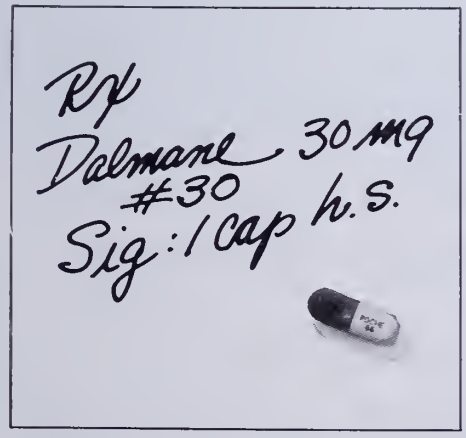
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In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.*: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.*: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed): *Sleep: Physiology and Pathology*, Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



For the sleep your patients need

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Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • August, 1971 • No. 2

Office of Publication
19 So. Jackson St. .... Montgomery, Ala. 36104
Subscription Price ..... $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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President's Page



Archie E. Thomas, M. D.

My fellow physicians, it is with deep reluctance that I have exercised the prerogative of the President's office, with concurrence of the Board of Censors, to intrude upon your normal activities of this day to call an emergency meeting of the College of Counsellors and House of Delegates . . . I deeply appreciate the presence of every one of you and want to assure you that only the urgency of the problem which lies before us has prompted our action . . .

I know you have come to Montgomery at considerable sacrifice but the problems which we face today may well be the most serious which have ever confronted the medical profession in this State . . . A system of conserving the public health which has served the people of Alabama well since 1875 is now threatened with revolutionary change

Stating our mission in its simplest form, we have come here today to decide as representatives of organized medicine whether we will accept this change as being in the best interest of those whom we serve . . .

If we decide that our fellow citizens deserve more than the conversion of public health into a political plaything, then it is our duty to determine how best we can fight these nefarious schemes . . .

As of this moment, organized medicine stands with its back to the wall . . . We are assailed by special interests which, for reasons of their own, are demanding voices as members of the State Board of Public Health . . .

We will hear more about this specific program from Dr. Hogan, the Chairman of our Committee on Legislation, and the other speakers who will follow him . . . From these facts, we hope will come the basis for the decision you will be called upon to make later in this session . . .

I plead for your indulgence as our speakers attempt to define the problems we face . . . Afterwards, the floor will be open for discussion to every Counsellor, every Delegate and any member of this Association who desires to speak . . .

There are no preconceived opinions which you will be asked to rubber-stamp . . . This is a common problem—this must be our common decision . . .

Once reached, I urge each and every one of you to make the decision of the majority the mandate of this body . . . Each of you should go home determined to do your bit to achieve the objectives which are agreed upon here today . . .

Text of speech given by Dr. A. E. Thomas at the Called Meeting of the College of Counsellors and House of Delegates on July 11, 1971 in Montgomery, Alabama.

Most of your officers have just returned from Atlantic City where they attended the AMA . . .

One of the most significant addresses was that of the President of the United States . . .

He challenged our profession to new endeavors, for its own preservation; laying great emphasis upon the drug situation in our country.

I am sure most of you have read his address in your daily paper . . .

What I am anxious to give you is the answer to the challenge which appeared in the New York Times and 14 other major newspapers across the country . . .

I quote:

"America's doctors of medicine, meeting at their one hundred and twentieth annual convention in Atlantic City, were challenged by you to assume a role of leadership in three areas of vital interest to our citizens and the health and well being of our society . . .

"You challenged us to improve America's health care system . . . to design a system that will insure freedom of choice . . . dedication to quality . . . Economic relief for our citizens and protection against catastrophe . . .

"We accept that challenge . . .

"You challenged us to contribute to the health of America . . . not just to its physical health, but to its mental health . . . to its moral health and to its character . . . By our training, our education and our daily involvement with the lives of people, we are equipped to do that . . .

"You asked us to give . . . of our time . . . of our energy . . . of our training and our dedication . . .

"We give it gladly . . .

"For we share your belief in America . . . We share your faith in our people and in our future . . . we share your wish that all of our people should enjoy decent standards of food, shelter, education . . . and health . . . We share your thought that the greatest reward for doing is the opportunity for doing more . . .

"For more than one hundred and twenty years America's doctors of medicine have worked together to guard the nation's health, and to create the world's highest standard of medical care for all of our people and we will continue to do so . . .

"To this we have added new programs designed to improve the delivery of health care to the poor and the underprivileged, to increase the number of doctors and to provide more care for more people through the use of physicians' assistants . . .

"We have done much . . . Much remains to be done . . .

"We accept your challenge . . ."

Gentlemen, we would sincerely like for these words to ring in the ears of the committee in charge of House Bill 841 and Senate Bill 492 . . . We came home from Atlantic City with real enthusiasm and renewed dedication . . .

We found upon our arrival in Montgomery that we had to appear before Representative Bert Bank's House Health Committee to oppose House Bill 841 . . .

As everyone knows, this legislation will dilute the effectiveness of the State Board of Health, by adding a representative from veterinary medicine, labor, optometry, the nursing profession, the pharmaceutical society and dentistry . . .

Now gentlemen, what gave us the staggering blow, these men are all to be selected by the Governor . . .

Most of those that testified, felt that the board should be changed . . . We lost the battle by a 13 to 2 vote . . . But don't despair . . . All is not lost . . . You have a hardworking Central Office, but they can't

possibly win this fight alone . . . All your officers can't win it alone . . .

A new nation wide poll reveals that a large number of Americans believe that our country has moved backwards in the last five years . . . War, inflation, radicalism and general malaise is sufficient to lead to a real breakdown in the country . . .

We are living in a time when it is fashionable for Americans to berate their nation, doctors included, and enter suit at the drop of a hat . . .

Have we forgotten the phrase, "This is God's Country?" Now let us get on with the task of setting the records straight . . . A disorderly world is more likely to listen to soothsayers than to doctors . . . In Alabama the question depends upon the recovery of confidence in our profession, in our country, in our faith and in ourselves . . . Let us support them all to the man . . .

In the final analysis, it is not the voice of fear that frightens us . . . On the contrary, it is apathy, indifference, inertia, and the loss of love and respect for the profession that has brought you and your country to the brink of disaster . . .

And unless you awaken from this lethargy your adversaries will destroy you in the twinkling of an eye . . .

Gentlemen, we have met the challenges of diseases in our State, and I feel that we are equal to the challenge of our Legislative adversaries . . . I earnestly call upon every member of this Organization to meet this challenge . . .

Respectfully submitted,
Sincerely yours,

Archie E. Thomas, M. D.
President

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

You Have To Tell!

Twenty-two years of marriage to a fellow who never tells me even the juiciest gossip should have prepared me. As the representative of your Auxiliary I was asked to a meeting to discuss the alarming rate of increase of V. D. I heard "the physician is the key to stamping out V. D." Not one M. D. was present as the blueprint for this county campaign to alleviate G. C. was presented. I wondered if M. D.s realized the key role designated to them. I assured the group that physicians are vitally interested in reducing V. D. and recommended the county medical society be contacted.

At a meeting on drug abuse an influential citizen stated angrily, "I know of only one doctor in this county who will go to a drug user in trouble." In a follow-up I learned that a physician who treats a minor, without parental consent, is open to legal action. The Good Samaritan Law does not yet cover these circumstances.

These instances, and others, indicate to me that you are not using your Auxiliary to the fullest potential. You have 1,527 physician wives pledged to act at your direction.

Any politician will tell you ten women can elect any candidate, pass any legislation or defeat any legislation. I urge you to instruct your county and state Auxiliaries. Give us the facts (ammunition), tell us who to elect, which legislation to pass or defeat and we'll fight any battle. We're on your side!



Mrs. Gilder L. Wideman

Frances Wideman
President



Ides of March Helped Create August

August—that noble, eminent and highly respected month—that lofty, great and time-honored span of 31 days (all of which adjectives are within the meaning of the word august)—did not come by its imperial cognomen accidentally.

Even after the month that preceded it had been renamed by the mighty Roman conqueror Julius Caesar to honor himself, this eighth month of the year was known by the misnomer "Sextilis," which in the Latin means sixth.

Then came the Ides of March, the murder of Caesar, and the internal upheaval of the nation that brought Anthony and Cleopatra together to provide Shakespeare with a fine subject for a play.

After the melee, after the spears and swords had been washed clear of blood, the foster nephew of Julius Caesar, Octavian by name, emerged alive and well. Meantime Octavian had changed his name to Augustus and when he became Rome's first emperor would be known forever after as Augustus Caesar.

He couldn't afford to let Uncle Julius get away with more honor than he. So he promptly named the month following July in his own honor. And insisting it must be equal in length and importance to the month before, he took a day away from already substandard February.

But Augustus couldn't take a touch of February weather with it. So his month must continue to share with July that hot, uncomfortable period known as "dog days," once considered conducive to that acute infectious virus disease known as rabies.

What with air conditioning, the inoculation against hydrophobia, and the discounting of "dog days" as another old wives' tale, the importance of this time in the problems of medicine has faded clear away.

U. S. A. and U. S. S. R. Moving on a Collision Course

Teddy Roosevelt didn't have much luck running for president on a plan for socialized medicine 59 years ago. So the nation's top politicians forgot about it until Teddy's cousin Franklin took over the White House. His successor Harry Truman pumped steam into the issue, which has been moving ahead erratically ever since.

"Those who are advocating socialized medicine contend that health care is a 'right,'" wrote Dick West in a Dallas Morning News column. "If all men are created equal, they ask, why should the rich have better doctors than the poor? Don't laugh! The argument is serious and could break the country. Here's why:

"If health care is a 'right' isn't food a right? Isn't an automobile or a lawyer a 'right'? If they are, is the government going to socialize the automobile industry and the legal profession? A man who works needs an automobile every day and may not need a doctor but once a year. So, a better

case can be made for socializing automobiles than socializing doctors."

It is axiomatic that the government can't "give" anything. Somebody must pay. That somebody is the taxpayer. The more important issue, says West: "Is America going to remain America, or is it going to become socialized like Russia?"

Ironically, the Soviet Union is veering away from socialism, increasing incentives to get better and broader medical care, while we are proposing to destroy these same incentives. With Russia swerving right and we swinging left, the world's two great powers seem on a collision course, philosophically speaking.

"As the debate over national health care becomes louder and louder," warns Editor West, "remember that . . . if and when medical care becomes socialized, you and your job may be next. That's the big issue."

Guest Editorial

Thoughts on the Treatment of Vaginitis

All of us have our favorite treatments for vaginitis. Often a bit more is required than just the diagnosis of trichomonas, moniliasis, or bacterial infection and the standard prescription of Flagyl or Mycostation or A.V.C. or some other preparation.

If trichomonas is the offender it is important that this be cured as there is increasing evidence that chronic trichomonas infection is associated with carcinoma of the cervix and it is well known that abnormalities of Pap smears can be a direct result of this infection. There is also increasing evidence that trichomonads are developing resistant strains to Flagyl; therefore it becomes more important to treat both sexual partners and stress that all of the prescribed medication be taken.

Following treatment for trichomonas many women will develop a mycotic vaginitis and it will save you much time if this is anticipated and treatment for the probable yeast complication be given at the time you institute initial therapy.

Douches are to be avoided except under specific instruction and great care should be taken to have the patient clean all douche equipment to avoid reinfection.

Mycotic vulvo-vaginitis seems to me to cause more frequent p a t i e n t complaints, particularly in women who are taking oral contraceptives and in pregnant patients. Women taking antibiotics or cortisone have a higher incidence of yeast, and diabetic patients are still more often afflicted. I can recall no less than five patients that I have seen with refractory yeast vulvo-vaginitis who were found to have diabetes which had been previously unsuspected.

Other factors that contribute to recurrent mycotic problems are women that wipe themselves from back to front thus adding fecal contamination. Many women also have a fixation on their pants. They must sleep in the tight fitting nylon variety which keeps the vulva moist. Usually the best you can hope to accomplish is to change them to cotton pants.

One last thought, women on oral contraceptives with monilia will not respond to treatment unless topical estrogen is added to the therapy or the oral contraceptives are discontinued.

In summary vaginitis is a time consuming chronic problem that causes a lot of lost man hours and considerable marital disability.

—Gene W. Gray, M. D.
President
Alabama Association of
Obstetricians and Gynecologists

Hobbies To Fill A Doctor's Leisure

No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard.

—Sir William Osler, 1909

Lucky License Plate Launches A Hobby-Industry

You might know that no one by the name of Clemmons (which usually is of Scottish derivation) could look a gift horse in the mouth or resist the purchase of anything at half price. Lowell Henry Clemmons, M. D., is not the exception to prove the rule.

So three years ago, informed that his automobile license tag number had been drawn, entitling him to a sewing machine at half price, this father of seven, grandfather of four decided that here was an opportunity to solve the family clothing problem. Further, daughter Jane, then 13, was the one to learn the intricacies of the contraption.

All went well until one day when the doctor came home from a very busy time at the office. When he saw the latest example of Jane's handiwork (and machine work), he was a little caustic and a little critical. A little hurt—and probably a little angry—she tossed the garment to her father and said: "Let's see what you can do!"

Several books on the subject and several false starts later, Dr. Clemmons was grinding away at the sewing machine with enthusiasm and imagination. Quicker than you could say Lowell Clemmons a thousand or so times, he was creating wardrobes for his wife, his daughters, the girls at his office,



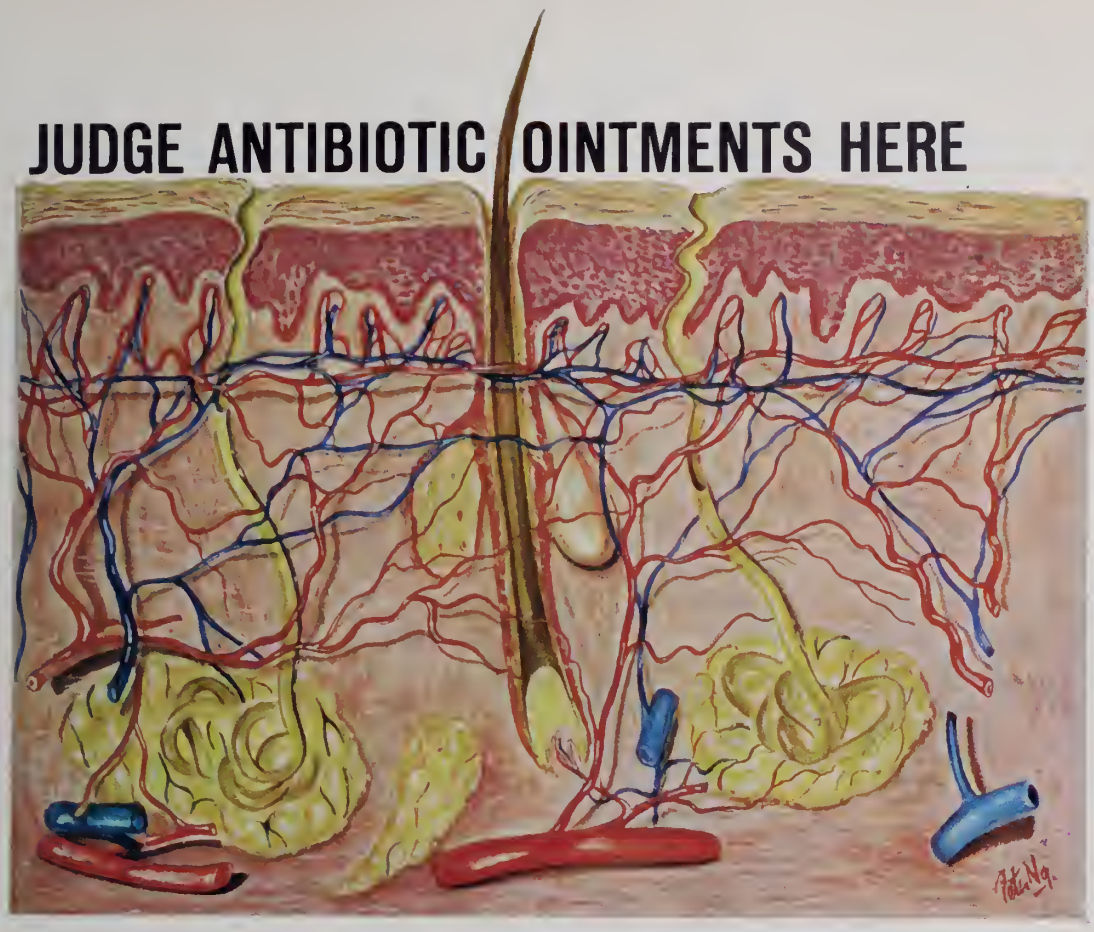
DR. CLEMMONS

"and any other female who would take the time to stand still."

When he reached the point where needlework was necessary, he sent it to one of his favorite patients for finishing. When this

(Continued on Page 86)

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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®

brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

gastritis



when G-I symptoms demand a potent synthetic anticholinergic

move up to "the Robinul response"

In treating hypersecretion and hypermotility associated with gastritis are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent anticholinergic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of gastric hypersecretion, making it a highly effective agent in gastritis and other upper G-I conditions associated with hypersecretion and hypermotility. Because Robinul Forte exerts a profound antispasmodic action, it is also useful in the treatment of lower G-I disorders, such as functional bowel distress and spastic and irritable colon. If the patient has a "one tract mind" concerning his condition, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2 mg. Forte (glycopyrrolate)

■ **INDICATIONS** Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily indicated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with acute episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities available, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recommended in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm; (2) gastric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic pancreatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure syndrome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital may be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient glaucoma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving 1 to 32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this. Blurred vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic drugs include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one tablet three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual patient's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum required to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved AHR/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue tablets engraved AHR/2 in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va. A·H·ROBINS



The get-up-and-go summer cold and allergy pill.

Novahistine LP can help your patients get out and enjoy themselves in spite of allergic rhinitis, hay fever or summer colds. And even when nasal congestion is caused by repeated allergic episodes, Novahistine LP can usually give prompt and long-lasting relief. These continuous-release tablets contain a vasoconstrictor-antihistamine formulation that goes to work rapidly and lasts for hours. And convenient, twice-a-day dosage lets most patients enjoy relief all day and all night. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Novahistine® LP decongestant

(Each tablet contains 25 mg. of phenylephrine hydrochloride and 4 mg. of chlorpheniramine maleate.)

DOW THE DOW CHEMICAL COMPANY, Rx Pharmaceuticals, Indianapolis

(Continued from Page 80)

patient's husband developed lung cancer and her source of income stopped, Dr. Clemmons turned to designing clothes and letting her make them.

A friend, manager of Cullman's largest department store, offered to market the clothes, and the label "Doctor C" was sewed into them. The business grew to where Dr. Clemmons was employing 15 women at $2 an hour, while he sketched designs, bought fabric, looked at cloth and went to fashion shows. Reaching the point where there was no time left to practice medicine, he turned the full responsibility over to one of the 15.

To slow a pace that was too demanding, last Feb. 1 he accepted the position of Medical Director of Dist. 1 Tuberculosis Hospital in Decatur.

There was need of occupational therapy for his patients. First, naturally, he started the women sewing—quilts, neckties, dolls, and any clothes they wanted to make. Another group took up work with leather goods. Then, at the urging of a sister-in-law, he discovered the fascination of "rock polishing and tumbling." At present, with 19 patients working with rocks and making jewelry, there is no time for sewing. And to let him take it from there:

"My nights and weekends have been kept busy calling on 'rock hounds' and begging, borrowing, and stealing any rocks that I can get my hands on. This is an entirely new field of interest for me and I always thought that people who collected rocks were a bit balmy. However, these rock hounds are a unique group of people. They are remarkably honest and unselfish and, unlike other groups, except the medical profession, are perfectly willing to share their knowledge with anyone who shows an interest.

"My patients now have four tumblers, a slab saw, a small saw, and grinding wheels. If there are any rock hounds among our profession I hope they will send us everything they don't want—plus some things they may want. If I can get enough supplies here, then with a clear conscience I can go back to my sewing."

Born in Kansas City, Kan., on Saturday, July 17, 1915, the Alabama import received his baccalaureate from Ottawa (Kan.) University, his M. D. from Rush Medical School (University of Chicago), interned at Charity, New Orleans, and served in our wartime navy before moving to our state. He has other interests and other hobbies—a Shriner, a Mason, a freelance writer, a licensed pilot, and a licensed judge of the American Horse Show Association.

But none of it rivals his present absorption. This father of seven, grandfather of four, declares with deep conviction that "sewing is an ideal hobby for the man who is happily married . . . and I am."

—W. J. M., Jr.

Taste!

Dicarbosil®
ANTACID

Your ulcer patients and others will love it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

Fathers and Sons in Medicine

Meet The Doctors Virgin Of Alabama

Hobby? You name it . . . and you are apt to find William Beverly Virgin, M. D., in hot pursuit of it, according to one who is quite close to him, who should know. He has a home workshop. He collects, cuts and polishes rocks. He paints. He has a coin collection. He fishes . . . And he travels!

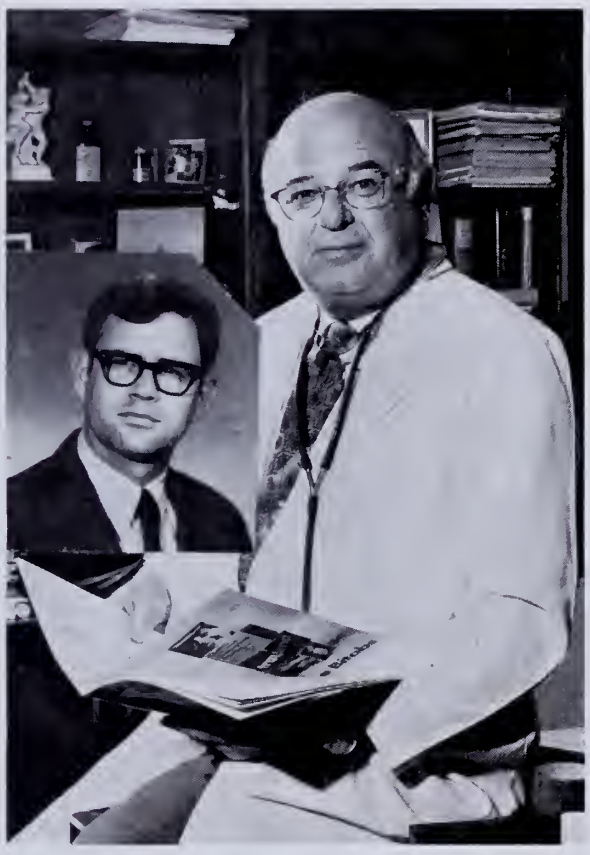
The senior of this father-and-son duo was born in Pensacola, January 15, 1915, the son of Jenny (Wadsworth) and Ira Holden Virgin, the latter a onetime Montgomery mayor, though his vocation was cotton and stock broker.

The future M. D. was named for his father's first cousin, William Beverly Westcott, M. D. He may not know it, but if he ever shook hands with this cousin, he may forever after boast that: "I've shaken hands with a man who shook hands with a lady who shook hands with George Washington!"

With his baccalaureate from the University of Alabama, Bill Virgin entered Tulane, and three years before he received his M. D. degree from the New Orleans school he was married to Eloise Stakely, daughter of Alabama Supreme Court Justice Davis Stakely, and granddaughter of the Rev. Charles E. Stakely, beloved pastor of Montgomery's First Baptist Church.

The Virgins' only son was born Nov. 16, 1942, and was named a junior, earned his M. D. from UAB School of Medicine and interned at St. Vincent's in Birmingham. Married to the former Linda Stuart of Bartow, Fla., he is with a Birmingham Medical group in charge of the Bessemer clinic.

In addition to their son, the senior Virgins have three daughters: Eloise (Virgin) Barnes, Virginia (Virgin) Waller, and Elizabeth Wadsworth Virgin.



William B. Virgin Junior and Senior

The William B. Virgins, Sr., share a love of travel with their friends, the John Allen Jones, M. D., and the four of them were flying to Turkey last month for a vacation when the deadline for the Journal's August issue passed. Dr. Jones and his son were the July subjects of "Fathers-and-Sons in Medicine." Like the Virgins, the Joneses have four children, the other three daughters.

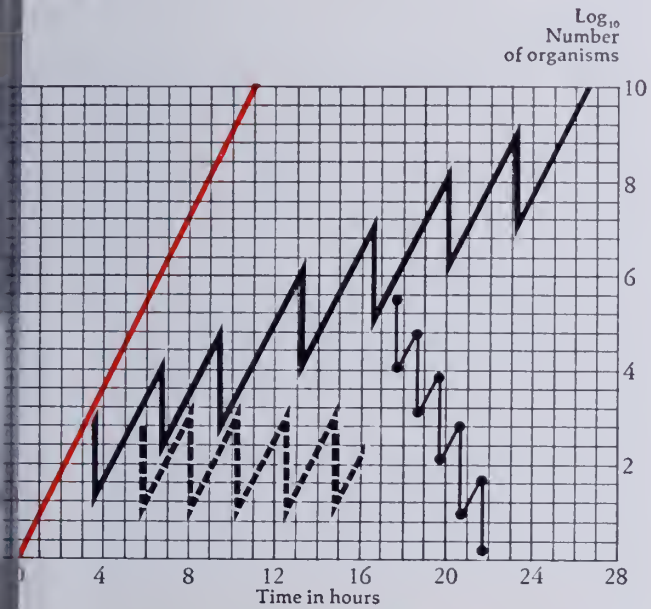
Because bacterial proliferation in the urine is a function of time and retention,[1,2,3] *dawn can be...*

the darkest hour.



Voiding frequency and bacterial build-up[1]
Graph shows the theoretical effect of various voiding frequencies on bacterial proliferation in the urine.

- maximum growth rate during the overnight period
- voiding every 3½ hours
- voiding every 2½ hours
- voiding every hour: the "washout" effect



For through-the-night coverage

Force fluids. Frequent micturition. It's hard to fault this regimen for dealing effectively with an acute bladder infection. Another fundamental adjunct to treatment is drug therapy for round-the-clock antibacterial coverage. Coverage that may be especially desirable during the night hours of sleep when urinary retention favors bacterial build-up in the bladder. This is the coverage that Gantanol (sulfamethoxazole) *b.i.d.* can provide.

Controls susceptible gram-negative and gram-positive bacteria

Within 2 to 3 hours of the initial 2-Gm adult dose, effective antibacterial levels in blood and urine begin working to control the most common urinary tract invaders. Subsequent 1-Gm *b.i.d.* doses maintain coverage your patient needs to fight *E. coli* and other susceptible gram-negative and gram-positive pathogens.

Your options: tablets or suspension

Prescribe Gantanol Tablets or the pleasant-tasting Suspension. Either dosage form provides your patient with the all-day, all-night coverage she needs to fight off nonobstructed cystitis.

References: 1. O'Grady, F., and Cattell, W. R.: *Brit. J. Urol.*, *38*:156, 1966. **2.** Hinman, F., Jr., and Cox, C. E.: *J. Urol.*, *96*:491, 1966. **3.** Lapides, J., *et al.*: *J. Urol.*, *100*:552, 1968.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

In nonobstructed urinary tract infections

Gantanol® B.I.D. (sulfamethoxazole)

12 hours of therapy with every dose

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

General Practice—

Age 28; Medical College of Alabama, 1967; National Board; serving general surgery residency LW-3

Age 49; University of Pittsburgh, 1951; seeking group or industrial practice. LW-3/1

Age 27; George Washington University 1969; National Board. LW-3/2

Age 37; University of Louisville, 1964; seeking group, industrial, associate, or institutional practice. LW-3/3

Internal Medicine—

Age 34; Georgetown University, 1962; Board certified; seeking group or associate practice. Available August 1971. LW-4

Age 36; University of Pennsylvania, 1961; Board certified; seeking group, associate, or hospital practice. Available October 1971. LW-4/10

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 34; Louisiana State University, 1963; Board certified; seeking group practice. Available August 1971. LW-13/5

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Age 32; University of North Carolina, 1965; Board certified, seeking academic (teaching, research) practice. Available October 1972. LW-4/9

Obstetrics-Gynecology—

Age 34; New York Med. College, 1964; National Board, Board eligible; seeking group or associate practice. Available August 1971. LW-5/1

Ophthalmology—

Age 30; Georgetown University School of Medicine, 1965; National Board. Available March 1972. LW-6/1

Age 35; Louisiana State University, 1963; Board eligible, seeking group or associate practice. Available January 1972. LW-6/3

Age 30; Medical College of Virginia, 1966; Board eligible; seeking group, industrial, associate, or institutional practice. Available September 20, 1972. LW-6/4

Orthopedic Surgery—

Age 32; University of Illinois, National Board, seeking associate practice. Available February 1972. LW-14

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Otolaryngology—

Age 31; Northwestern University, 1964; Board eligible; National Board; seeking solo, group or associate practice. Available September 1971. LW-7/2

Pathology—

Age 32; Case Western Reserve University, 1964; National Board; Board certified; seeking group, associate or institutional practice. Avialable August 1971. LW-8

Age 39; Ankara Medical School, Turkey, 1956; Board eligible; seeking associate practice. LW-8/2

Age 39; St. Louis University College of Medicine, 1960; Board certified; seeking associate practice. Available October 1, 1971. LW-8/3

Radiology—

Age 32; Medical College of Alabama, 1963; completing residency in radiology. LW-24/2

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 37; Indiana University, 1960; Board certified, seeking associate practice. Available summer-fall 1971. LW-10/5

Surgery—

Age 33; Tufts University School of Medicine, 1962; National Board, Board certified, seeking group, industrial, or associate practice. Available Summer 1971. LW-11/3

Age 40; Southwestern Medical School, 1964; Board eligible, seeking solo or associate practice. Available September 1971. LW-11/5

Urology—

Age 33; New York Medical College, 1964; National Board, seeking group, associate, or institutional practice. Available September 1971. LW-12/3

Physicians Wanted

Special Openings—

Community of 3 adjoining towns with a total population of 30,000 and outlying rural area of 20,000, located in Northwest Alabama, with needs for General Practitioners and specialists including Otolaryngology, Internal Medicine, OB-Gyn, Pediatrics, Psychiatry, Surgery, Urology and Orthopedics. 2 modern hospitals with total beds of 351 and plans for a 15 suite professional bldg. adjacent to one of the hospitals. Industrial area with outlying agricultural areas. Excellent recreational facilities including fishing, hunting, boating and golf. PW-13

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

Opportunity in town of 4,000 population in trade area of 50,000 population, located within 100 miles of two metropolitan areas in south Alabama. Industrial and farming area. 44-bed hospital. Office space and equipment available in new building with another physician. Several churches, schools, and service clubs. PW-1

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

For town of 10,000 population in county of 40,000 population located in scenic mountainous section of Northeast Alabama. Office space and equipment available. Hill-Burton hospital-nursing home. Expanding industries in top agricultural area. PW-1-2

Opportunity in town of 2,500 population in Northeast Alabama in trade area of 15,000 population, located 7 miles from city of 55,000, and four miles from a 300-bed modern hospital. Position available for one who has not served military commitment. Clinic building and some equipment available. Willing to build a new clinic for two doctors or a small group. Especially seeking general practitioner and internist. PW-1-7

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

Associate needed in general practice and surgery in northeast Alabama town of 6,000 population. Modern 70-bed hospital. Prefer doctor less than 40 years of age. Salary guaranteed first year, then partnership. PW-1/9

Opportunity available July 1st in town of 2500 near the Gulf. No investment required and most of the equipment is less than three yars old. Hospital in town. Emergency calls shared by four other doctors. Excellent recreational facilities. PW-1/10

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11

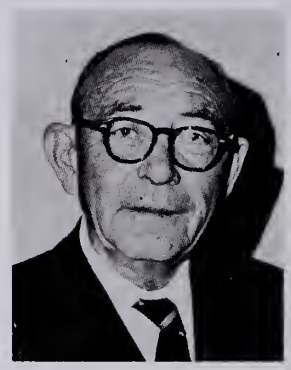
Two Of Dozen New Members Of 50-Year Club

Nine of the dozen physicians eligible for induction into the 50-Year Club at the next annual meeting of the Medical Association of the State of Alabama are from Jefferson County. And two of the nine are: Tinsley Randolph Harrison and Richard Olney Russell.

Both are native Alabamians, Dr. Harrison born March 18, 1900 in Talladega, Dr. Russell in Somerville, Ala., Dec. 1, 1897. But there all parallels end, one going north and east for his education, the other staying in his native South; one finding his bride in Birmingham, the other going to New England for his. Both turned to internal medicine as a specialty, but one entered private practice in Birmingham, while the other branched into cardiology and into teaching.

Tinsley R. Harrison earned his A. B. degree at the age of 19 at the University of Michigan and, three years later, his M. D. from Johns Hopkins University School of Medicine. He interned at Peter Bent Brigham Hospital, Boston, had a year's residency there, another year at Johns Hopkins, and a concluding year at Vanderbilt, where he went into teaching, continuing there from 1928 to 1941. His teaching career ultimately brought him back to Alabama in 1947 where he has remained ever since.

Many honors have come to Dr. Harrison in the course of his distinguished career including an honorary M. S. degree from the University of Michigan, an honorary D. Sc. degree from the University of Alabama, the Marchman Award (Dallas Southern Clinical Society), Distinguished Service Award (Silver Medallion) from the American Heart Association, Certificate of Appreciation (U. S. Public Health Service), Distinguished Service Award (AMA), Commendation Resolutions from both Alabama's Senate and House. In 1969 he was designated Distinguished Physician by the VA Hospital Systems, in 1970 Distinguished Emeritus Professor of Medicine, UAB School of Medicine; also in 1970 Honorary Fellow, American College of Cardiology, and Distinguished Teacher, American College of Physicians; and in 1971 Alabama Academy of Honor (in the Field of Medicine).



DR. HARRISON



DR. RUSSELL

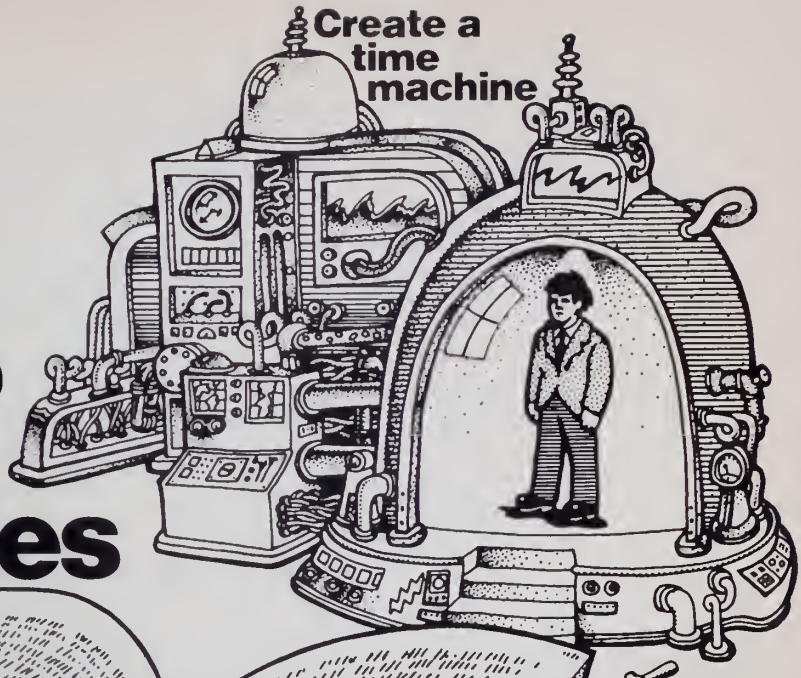
There are 195 separate entries in a bibliography of his written contributions.

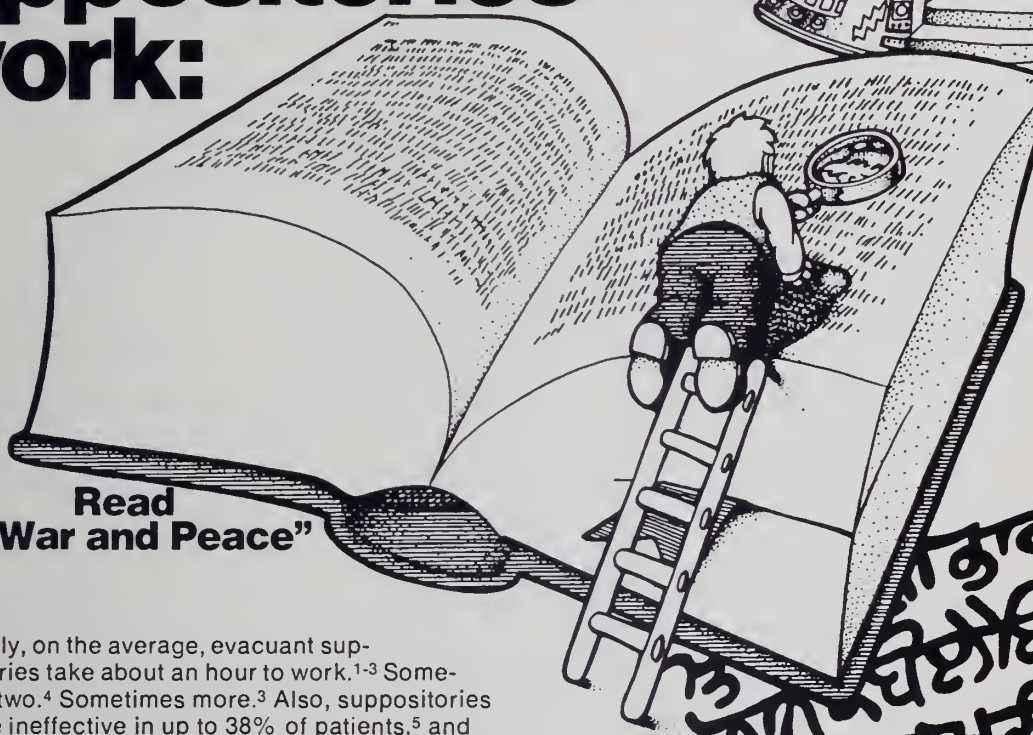
Dr. Harrison was married Feb. 21, 1924, to Elizabeth Woodward of Stonington, Conn., and there are four living children: Tinsley Randolph Harrison, Jr., Emily (Harrison) McGrath, Helen Elizabeth (Harrison) Smith, and John Bondurant Harrison.

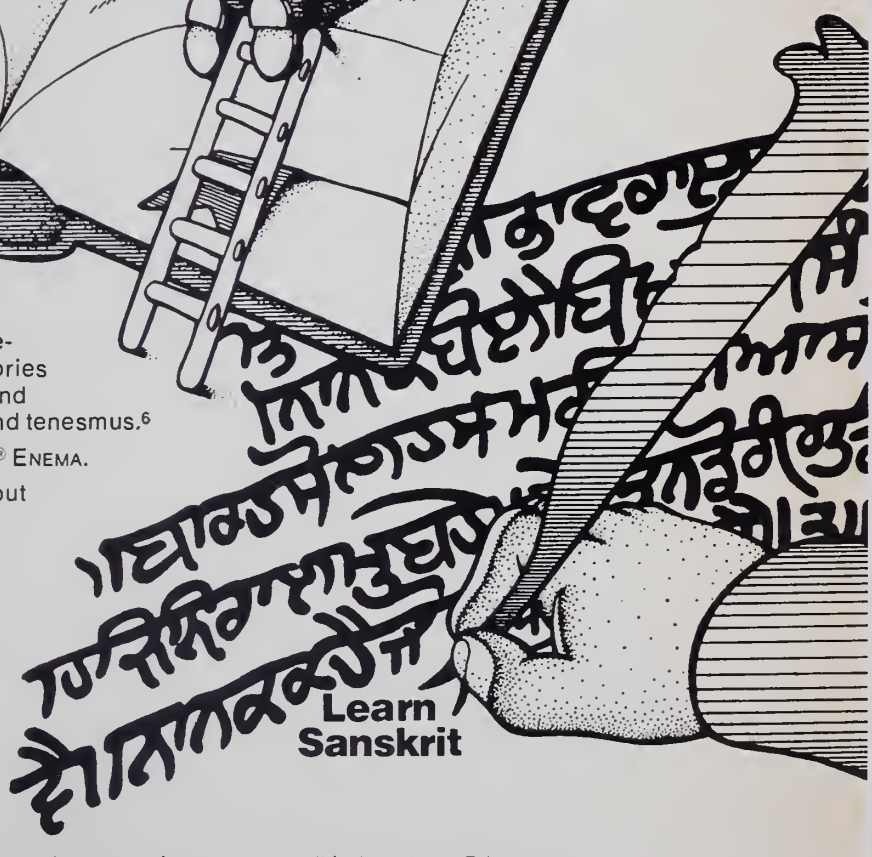
Richard Olney Russell, the son of a practicing physician and the father of two Doctors of Medicine, first attended State Normal School, Florence, took his premed schooling at Auburn, and went to Tulane for his M. D. degree. Because his full biography will be included with those of his father and his sons as subjects of a Fathers-and-Sons in Medicine in the next two months, it will not be repeated here.

Both Drs. Harrison and Russell qualified, of course, for the exclusive 50-Year Club of MASA by receiving their M. D. degrees in 1922.

What to do until suppositories work:







Actually, on the average, evacuant suppositories take about an hour to work.[1-3] Sometimes two.[4] Sometimes more.[3] Also, suppositories can be ineffective in up to 38% of patients,[5] and not infrequently produce smarting, burning and tenesmus.[6]

Alternative to the long unpleasant wait: FLEET® ENEMA.

FLEET ENEMA works within 2 to 5 minutes without pain or spasm. FLEET ENEMA induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool. FLEET ENEMA avoids the irritation common with soapsuds enema. And FLEET ENEMA is leakproof: a rubber diaphragm at the base of the prelubricated tube prevents seepage and controls the rate of flow, assuring comfortable administration.



FLEET ENEMA. Regular and pediatric. Both completely disposable—like suppositories, only better. Much better.

C. B. FLEET CO., INC.
Lynchburg, Va. 24505

Fleet pharmaceuticals

Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present.
Caution: Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

Call it what you will, it may be premalignant..

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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and Efudex® (fluorouracil) 5% cream can resolve it.

Call it actinic, solar or senile keratoses, many regard it as "precancerous."[1,2]

Topical fluorouracil, considered by some dermatologists to be a major advance in the treatment of multiple solar keratoses,[3,4] offers the physician a relatively inexpensive alternative to cryosurgery, electrodesiccation and cold knife surgery. Of the topical fluorouracils available, only Efudex offers 2% and 5% solution and 5% cream formulations—formulations that have proved effective in the treatment of these mutliple lesions.

Usual duration of therapy, 2 to 4 weeks.

Studies showed that with the 2% and 5% Efudex preparations, the usual duration of therapy was only 2 to 4 weeks.[5] Other studies with topical fluorouracil revealed that when concentrations of less than 2% were used, significant numbers of lesions recurred.[6]

Treats the lesions you can't see, too.

Numerous lesions, not apparent prior to 2% and 5% Efudex therapy, manifested themselves by definite reactions, while intervening skin remained relatively unaffected.[5] The early eradication of these subclinical lesions (which may otherwise have undergone further progression) probably accounts for the reduced incidence of future solar keratoses in patients treated with topical fluorouracil—especially with 5% concentrations.[6]

How to identify solar keratoses.

Typically, the lesion—a flat or slightly elevated brown to red-brown papule—is dry, rough, adherent and sharply defined. Multiple lesions are the rule.

Predictable therapeutic response.

The response to a typical course of Efudex therapy is usually characteristic and predictable. After 3 or 4 days of treatment, erythema begins to appear in the area of keratoses. This is followed by a moderate to intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of this response generally occurs two weeks after the start of therapy and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. Lesions that do not respond should be biopsied.

References: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, Grune & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T, and Honeycutt, W. M.: "Treatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *Pharmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, p. 92. 3. Belisario, J. C.: *Cutis, 6*:293, 1970. 4. Sams, W. M.: *Arch. Derm., 97*:14, 1968. 5. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and Klein, E.: *Cancer, 25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

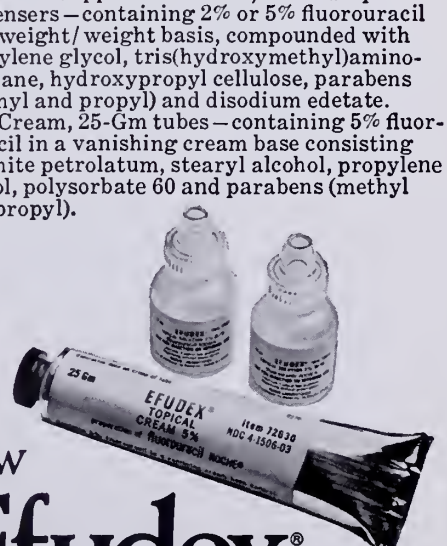
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



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Bee-Double-Dee-Double-Em-Oh-Pee

More recently, the physicians tend to hunt disease in packs, and although there are consequently some sicknesses named after two or three physicians at once, like Hand-Schuller-Christian disease, or the Charcot-Marie-Tooth syndrome, that sort of thing gets a bit of a mouthful. And so Biggs and her friends, even if modesty had allowed them, could scarcely have expected the doctoring world to be grateful if they had converted themselves to alphabetical order and called their new disease the Biggs-Dacie-Douglas-Macfarlane-Merskey-O'Brien-Pitney syndrome. Dammit, a bleeding patient could bleed to death with a disease named like that while you were telling the blood transfusion service by telephone what he had. Could they have used initials? Bee-double-dee-double-em-oh-pee disease? Bit hard to remember. And not quite dignified enough for a serious matter, somehow.

—The Medical Journal of Australia.

The Sun, A Mixed Blessing

Probably the best we, as physicians, can say about sunlight is that it is a mixed blessing. Granted, its ultraviolet component . . . kills germs, its infrared portion warms the planet, and its visible rays allow us to see what we are doing. From a clinician's point of view, however, the liabilities of sunlight often seem to outshine its assets . . . The inimical effects . . weigh heavily in our practices.

It is almost a platitude now to point out that sunlight . . . gives us, in inverse proportion to our natural coloring, wrinkles and skin cancer . . . Perhaps less well known is the fact that senile keratoses are a direct and proximate result of chronic exposure to sunlight and that, in about 20 per cent of patients, squamous cell carcinoma arises in one or more of the lesions.

—from article by James Kalivas, M. D. in Journal of the Kansas Medical Society

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On conversation, Bulwer-Lytton made an incisive observation:—"The true spirit of conversation consists in building on another man's observation, *not* overturning it."

Some forgotten cynic (it sounds like Oscar Wilde) put it this way:—"The secret of polite conversation is never to open your mouth unless you have *nothing* to say."

Most folks have presence of mind. The trouble is absence of thought, said Howard W. Newton. Said another: "The only reason some people become lost in thought is because it's unfamiliar territory to them."

Troubles in 50th State

George Bracher, president of the Hawaii County Medical Society and the Hawaii Chapter of the American Cancer Society, is up in arms. He feels that the high judgments and out-of-court settlements on the mainland are affecting the Big Island's much needed supply of new physicians. One young orthopod who wanted to practice in Hilo was told by the insurance company that they would cover him for the first six months for $5,000, but could give him no assurance as to the next six months. Even practicing doctors are having second thoughts. George says, "Some of the men say that if it gets worse, they'll just quit . . . Others say that they'll have to pass the increased cost along to their patients. . . ."

—Hawaii Medical Journal

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Published Under the Auspices of the Board of Censors

Volume 41 August, 1971 Number 2

Yellow Fever Vs The American Team**

By Emmett B. Carmichael*

Due to the nature of most of my researches which involved many hundreds of experimental animals and because it is not such a pleasant subject to review, your speaker has elected to discuss his avocation or hobby of writing biographical sketches. It is hoped that it might stimulate at least one of you to try your hand as a biographer.

In 1930, the Annual Meeting of the Alabama Academy of Science was held at the Alabama Polytechnic Institute, now Auburn University. Following my elevation to the presidency of the Academy, Dr. Fred Allison, the immediate past president and professor of Physics and Chairman of the Department, jumped to his feet and moved that from that day forward, each of the presidents of the Academy present a presidential address. The motion carried and it seemed all right at that time. However, when it was realized that the next Annual Meeting of the Academy would be held at the University of Alabama, Tuscaloosa, where I had been for only three years and many of my colleagues had served 15 to 30 years, many troubled moments resulted. So after some weeks of worry, it was decided to review the scientific manpower produced by the

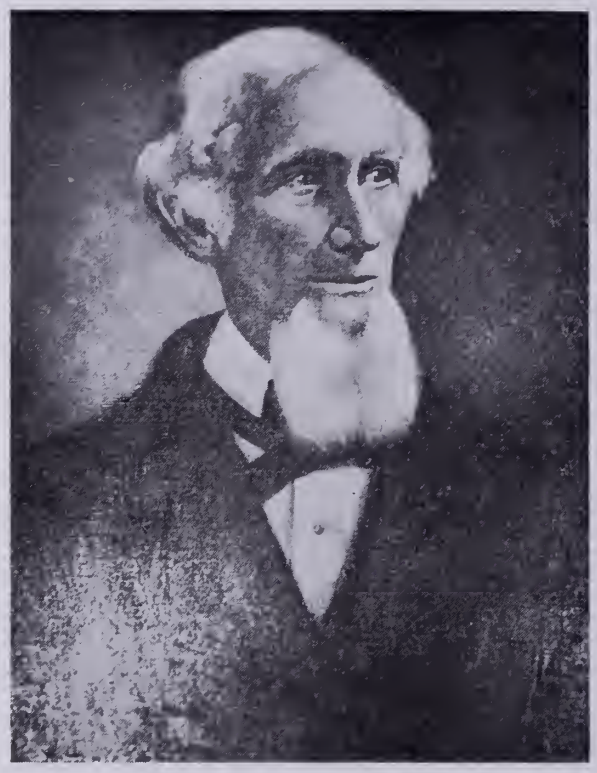


La Fayette Guild (1825–1870)
Lafayette Guild, M. D.

Southern states. Dr. J. McKeen Cattell, Editor of SCIENCE, was kind enough to place my paper, "The South's Contribution to Science" as the lead article in the October 30, 1931 issue. While visiting with Miss Mary Gorgas, Assistant Librarian University of Alabama, and sister of Dr. William Crawford Gorgas, she commented favorably on the paper except for the fact that Dr. LaFayette Guild, a native of Tuscaloosa was not included. So, after some heated dialogue, a biographical sketch about Dr. Guild was

*Professor of Biochemistry Emeritus and Consultant to the Editorial Board of The Alabama Journ. of Med. Sciences.

**Gold Medal Address, read at the Gold Medal Banquet at the 48th Annual Meeting of The American Institute of Chemists, at the Parliament House, Birmingham, Ala., May 14, 1971.



Josiah Clark Nott, M. D.

agreed upon. That paper appeared in *The Annals of Medical History,* in 1935. Since then more than 50 biographical sketches about chemists, scientists and physicians have been published.

These are the results of the researches of an American Team of Scientists. The term "American Team" is used since all of the individuals earned their terminal degrees in the United States of America even though four of them were born elsewhere.

Dr. Josiah Clark Nott, Columbia, South Carolina, received the M. D. degree from the University of Pennsylvania in 1827. After practicing in his home town a few years, he opened his office in Mobile, Alabama. He suggested that insects could transmit yellow fever. His paper on the subject appeared in the January, 1848 issue of *The Charleston Medical Journal and Review*, and in the March, 1848 issue of the *New Orleans Medical and Surgical Journal.*

In 1848, Dr. LaFayette Guild, Tuscaloosa, Alabama, received the M. D. degree from Jefferson Medical College, Philadelphia, Pennsylvania. It seems that the South Carolina Journal was not read by Dr. Guild before he graduated. Dr. Guild joined the U. S. Army as Assistant Surgeon in 1849, and after a few years was transferred to Fort Columbus, Governors Island, New York Harbor, as Quarantine Inspector. He observed the first case of yellow fever on board a vessel in 1855. Then several other vessels arrived in port with other cases of the disease. Since he observed that the disease was disseminated along the harbor side of the island, he felt that the wind swept over the infected ships and filled the air with their pestilence. He observed that the yellow fever was not communicated by simple contact with one suffering with the disease or with the effluvia arising from either his body or his clothing. He observed that the disease spread some distance from the ships in quarantine and attributed the spread to the wind. He felt that yellow fever was generated from organic matter and no doubt was influenced in his thinking by Dr. Benjamin Rush, who thought that the Philadelphia epidemic of 1793 was caused by a shipment of coffee, which spoiled on the Philadelphia docks. Dr. Guild received both the B. A. and M. A. degrees before receiving the M. D. degree and as an educated individual, it was unfortunate that he had not read about Dr. Nott's theory that insects could transmit yellow fever. He was so certain that the winds were involved, that he published his report on yellow fever at Fort Columbus, New York in a Government publication, which stressed papers on Meteorological and Weather Reports. If Dr. Guild had read about Dr. Nott's theory, he might have blamed the mosquito for transmitting the disease about 45 years before the final proof was established by the U. S. Army Board, headed by Dr. Walter Reed.

Dr. Carlos Finlay, native of Cuba, received his college training in France and the M. D. degree from Jefferson Medical College in 1855. Dr. Finlay had plenty of time while a medical student to have read about Dr.

Nott's theory as to how yellow fever could be transmitted. Dr. Finlay does not refer to Dr. Nott's theory; but he attempted to prove that mosquitoes were involved in the transmission of yellow fever and published a paper on the subject in 1881. Dr. Finlay was the first person to specifically accuse the mosquito, but he was unable to prove that the mosquito was involved in transmitting yellow fever.



Henry Rose Carter, M. D.

Dr. Henry Rose Carter, native of Virginia, graduated with the M. D. degree from the University of Maryland in 1879. After an internship of two months, he entered the Marine Hospital Service (now the U. S. Public Health Service) as Assistant Surgeon. Two months later he saw his first case of yellow fever while stationed at Cairo, Illinois. Dr. Carter was stationed at several Southern port cities, where he was involved in quarantine work. In order to determine the proper period of detention of personnel of ships, it was necessary to know the period of incubation of yellow fever. There was not a satisfactory answer at that time. In June, 1898, yellow fever was discovered at McHenry, a small town in Southern Mississippi. Dr. Carter represented the Service in assisting the Mississippi Board in confining the fever to McHenry, and eliminating the disease from the city. It was the first epidemic of yellow fever to be controlled or suppressed in the U. S. in the Summer months.

While in Mississippi in 1897, Dr. Carter contracted yellow fever and he seemed to have had a mild attack.

On September 4, 1898, Dr. Carter was ordered to take charge of various outbreaks of yellow fever in the rural communities of Northwestern Mississippi; Orwood and Taylor. The epidemic spread to isolated farm houses where Dr. Carter was able to make careful records of the period elapsing between the appearance of the original cases of yellow fever and the development of secondary cases. He observed the period of time from the date the mosquito fed on a yellow fever patient before the mosquito could transmit the infection. He termed the interval, the extrinsic incubation period, and reported it to be not less than 12 days. Following the extrinsic incubation, the mosquito could transmit the fever to man.

The Spanish American War began when the U. S. Congress declared a state of war as of April 21, 1898. The peace treaty was signed with Spain on December 10, 1898. Five thousand soldiers and sailors lost their lives during the conflict and less than 400 were killed in battle. More than 90 percent of the casualties were caused by disease; and yellow fever and malaria were responsible for most of them.

Because of his wide experience with yellow fever, and since he was immune, Dr. Henry Rose Carter of the Public Health Service, was assigned to Cuba as Chief Quarantine Officer of the Island.

Since many of the deaths of our service-

men during the Spanish American War were caused by yellow fever, and since the losses among U. S. troops became so great after we occupied Cuba in 1898, Surgeon General George M. Sternberg induced the Secretary of War, Elihu Root, to appoint a Board of Army Officers to investigate the cause of the disease.

The Board included the following Army Doctors:

Dr. Walter Reed, Chairman of the Board

Dr. James Carroll, to be in charge of bacteriological work



Walter Reed, M. D.

Dr. Jesse W. Lazear, specialist in insect work

Dr. Aristides Agramote, Pathologist

Dr. Lazear and Dr. Agramonte were already on duty in Cuba. Dr. Reed and Dr. Carroll joined them in June, 1900.

In 1899, the Provisional Government of Cuba appointed Dr. Carlos Finlay, Chairman of the Yellow Fever Board. Although he was a native of Cuba, he had offered his services to the U. S. Army and had served in the Santiago Campaign. It was in this capacity that the members of Reed's Army Board soon met with Dr. Finlay, but were not convinced by Finlay's theory that the mosquito could transmit yellow fever, since he had never been able to prove it.

Dr. Walter Reed was born in Gloucester County, Virginia, in 1851. He received the M. D. degree from Virginia in 1869, and a second M. D. degree from Bellevue Hospital Medical College, New York City, in 1873. He entered the U. S. Army as Assistant Surgeon and with the rank of 1st Lieutenant, in 1875. In 1889, after serving at several posts, he was assigned to be the attending surgeon and examiner of recruits in Baltimore with permission to pursue professional work at the Johns Hopkins Hospital. This brought him under the influence of Dr. William H. Welch, Pathologist at the Johns Hopkins Hospital, where he received special training in bacteriology and pathology. In 1893, he was appointed curator of the Army Medical Museum with the rank of Major and Professor of Bacteriology and Clinical Microscopy at the U. S. Army Medical School.

Dr. James Carroll was born in England in 1854. He attended Albion House Academy in Woolwich, England. He received the M. D. degree from the University of Maryland in 1891, and did a post-doctorate at Johns Hopkins University before entering the U. S. Army.

Dr. Jesse William Lazear was born in Baltimore County, Maryland. He graduated from Johns Hopkins University and received the M. D. degree from Columbia University in 1892. He joined the staff of Johns Hopkins University and distinguished himself in research on the structure of the Malarial parasites before entering the U. S. Army.

Dr. Aristides Agramonte was born in Cuba in 1869. He was brought to the United States in infancy. He attended the College of the

City of New York and received the M. D. degree from Columbia in 1892.

Three events occurred which emphasized the importance of checking Finlay's mosquito theory.

1. Dr. James Carroll allowed an infected mosquito to bite him and he had a severe case of yellow fever and nearly lost his life.

2. Dr. Lazear was accidentally bitten by an infected mosquito on September 13, and came down with yellow fever five days later. He died on September 25th.

3. Non-immune nurses in attendance of sick, yellow fever patients, seldom contracted the disease. This observation confirmed Dr. Guild's findings that yellow fever was not communicated by simple contact with one suffering with the diseae.

With the permission of the Military Governor of Cuba, Major General Leonard Wood, Dr. Reed's Board established a heavily quarantined experimental headquarters on November 20, 1900, and named it Camp Lazear for the late member of the Army Board. Reed and his team, working with the non-immune volunteers and the Stegomyia mosquitoes that had fed on well marked cases of yellow fever, made the following observations:

1. That at least 12 days were required from the time that the Stegomyia mosquito fed on a yellow fever patient before it was capable of conveying the infection to a non-immune. This confirmed Dr. Carter's observation that he made in his studies in Mississippi, and in a letter by Dr. Reed, written on February 26, 1901 to Dr. Carter, Reed stated: ". . . . . you must not forget that your work in Mississippi did more to impress me with the importance of an intermediate host than everything else put together."

2. The period of incubation in human beings was found to be about four days before symptoms were observed following a bite by the infected mosquito (frontal pains; headache, pain throughout body and black vomit).

3. The mosquito had to bite a yellow fever patient during the first few days of the disease for it to become a carrier.

4. The causative agent was not a bacterium, but a filterable virus which could be transmitted by either the bite of a mosquito or by subcutaneous injection of blood from a patient suffering with yellow fever. This proved that the causative agent was present in the blood stream.

5. That yellow fever was not caused by fomites (bedding, clothing, personal effects, which had been contaminated by contact with yellow fever patients and their discharges).



William Crawford Gorgas, M. D.

Dr. William Crawford Gorgas was born on October 3, 1854, at Toulminville, near Mobile, Alabama. He received the M. D. degree from Bellevue Medical College, New York City,

in 1879, and entered the Medical Department of the U. S. Army the next year. In 1882 he contracted yellow fever and it seems that his illness was of short duration. Since he was immune to yellow fever, he accompanied the military expedition against Santiago in 1898. After the treaty was signed, Dr. Gorgas became Chief Sanitary Officer of Havana. He also was a member of the Havana Commission, which was consulted when the Reed Commission was in doubt as to whether a volunteer had yellow fever.

Dr. Gorgas secured the aid of Mr. Joseph A. A. LePrince to help in the sanitary work in Havana. LePrince was born in Leeds, England and came to the United States with his parents when he was six years old. He received the Civil Engineering Degree from Columbia University in 1898. He joined Dr. Gorgas on a 60 day trial basis and continued on as an associate until the City of Havana was free from yellow fever. Later on he accompanied Gorgas to Panama and stayed until the canal was opened.

Mr. LePrince made several observations:

1. Mosquitoes seek shelter from the wind

2. The odor of human beings attracted mosquitoes

3. He studied the length of the flight of mosquitoes by the aid of analine dye, which he used to stain their wings.

4. Top minnows were helpful in controlling mosquitoes.

Dr. Gorgas and his Corps of Sanitarians had not only been occupied with yellow fever problems but also were concerned with malaria which had killed more than 1,000 of our occupation forces in Cuba per year during 1898 and 1899.

Fortified with the knowledge that Reed's commission had discovered about the Stegomyia mosquito, Gorgas set about the task of cleaning up the City of Havana.

Dr. Gorgas had observed the following habits of the Stegomyia mosquito:

1. They needed rain water for the larval stage.

2. They laid their eggs in artificial containers and usually near a house inhabited by humans.

3. The female is the one that bites.

4. The famale needed human blood before she would lay her eggs. The campaign to get rid of the mosquitoes began on February 15, 1901. Dr. Gorgas and his Corps of Sanitarians applied rigid, vigorous antimosquito measures and by September of 1901, yellow fever ceased to be a factor in the health of Havana.

Dr. Reed was frequently called to Washington, but he kept in close contact with Dr. Gorgas. Several of his letters to Dr. Gorgas have been preserved and all are in long hand. It seems that the servicemen in Havana held a formal dance, which Dr. Gorgas attended, even though Mrs. Gorgas was not on the island at that time. Also, it seems that Dr. Gorgas, being the Southern gentleman that he was, on noting that a young lady was not dancing, introduced himself and requested a dance. The young lady was a French widow, who could speak Italian. Dr. Reed observed the incident, and seemed to joke with Dr. Gorgas about it. In fact, at lease eight of Dr. Reed's letters from Washington, referred to the incident and in closing, he would make some fitting reference about it such as, the following quotation from his letter of December 21, 1901.

". . . . . I must hurry home in an open streetcar, and thereby chill my very marrow—My best regards to Mrs. Gorgas—[I'm glad that she got you away from that French widow, who talked Italian].

With all manner of greetings for a Merry Xmas and happy 1902.

Believe me,

Sincerely your friend,
S/Reed

The friendliness of the letters and the continued needling of Dr. Gorgas about the incident, points up the fact that they were close friends. They were not aware at that time that they were going to be world heroes for their efforts in eradicating yellow fever as a scourge to humanity.

The Panama Canal Convention was signed on November 18, 1903, and was proclaimed in full effect on February 24, 1904.

A Canal Commission was appointed and it was packed with engineers who had little interest in health problems. Dr. Gorgas was not a member of the Commission. Gorgas was Chief Sanitary Officer and was instructed to go to Panama in June 1904, and survey the situation. He had a small group of assistants which included Dr. Henry Rose Carter and Mr. Joseph A. A. LePrince. The members of the Commission refused to provide needed materials such as screen wire, disinfectants and other supplies; so Gorgas' friend, Dr. William H. Welch came to his aid and so did Dr. Alexander Lambert of New York City. Dr. Lambert was a close friend and hunting companion of President Theodore Roosevelt. He told Roosevelt that if he wanted that ditch dug in Panama, he should give Gorgas all the necessary aid. He reminded Roosevelt that the French failed to dig the ditch because of the large number of casualties due to yellow fever and malaria.

Two more physicians joined Gorgas in Panama.

Dr. Lloyd Noland, born in Fairfax County, Virginia in 1880. He received the M. D. degree from the Baltimore Medical College in 1903 (University of Maryland). He joined the group in 1905, and soon became executive officer to Dr. Gorgas.

Dr. Robert E. Noble, born November 5, 1870 in Rome, Georgia. He graduated from Alabama A. & M. College (now Auburn University) and received the M. D. degree in 1899 from Columbia University. He joined Gorgas' Sanitary Group in 1907, and continued on until the Canal was opened on August 15, 1914.

By 1914, Gorgas and his Corps of Sanitarians had rid the Panama Canal Zone of yellow fever, as they had done in Havana, Cuba.

Since infected ships not only docked at various Northern ocean ports, but also at ports along our navigable rivers, yellow fever was disseminated into both our Northern and Southern States. Therefore, the yellow fever scourge was widespread and the physicians in our Northern states were heavily involved in the treatment of the disease during many epidemics. It is unique, however, that all of the eight Americans on "The American Team" were native sons of our Southern states.

To the American Team and to all of the non-immunes who volunteered to submit to the researches on yellow fever, all mankind owes a great debt of gratitude!

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Letter To The Editor

I would like to take this opportunity to thank you and your capable colleagues for allowing the publication of Doctor Tysinger's treatises in the management of chronic cardiopulmonary diseases.

As you know, we have purchased a number of reprints which we have forwarded to physician acquaintances around the world. We continue to receive very favorable comments relative to his fine composition. It is very hard to find such detailed compiled information in available literature.

We plan to use one of his upcoming treatises, if possible, as a very worthy teaching tool throughout the entire field of cardiopulmonary care.

Again I would like to thank you for all you continue to do to disseminate a very high level of clinical information to the medical communities of the world.

Sincerely,
bird Corporation
Forrest M. Bird, Ph.D.

All higher motives, ideals, conceptions, sentiments in a man are of no account if they do not come forward to strengthen him for the better discharge of the duties which devolve upon him in the ordinary affairs of life.

—Henry Ward Beecher (1813-1887)

Too great a hurry to discharge an obligation is a kind of ingratitude. In the intercourse of life, we please more by our faults than by our good qualities. Hypocrisy is the homage vice pays to virtue.

—Duc de la Rochefoucauld (1613-1680)

English Hobgoblins

Doctors who pride themselves on correct word usage will delight in "Miss Thistlebottom's Hobgoblins," a book just published by Farrar, Straus and Giroux of New York. It might be called "Correct English" but for the fact that the author, Theodore M. Bernstein, editorial director of The New York Times Book Division, gives a preference to Americanisms.

Miss Thistlebottom, in case you've forgotten was your elementary-school teacher who laid down all manner of taboos concerning the use of language. Which is precisely what the Bernstein book does.

The book is divided into four parts: 1) Witchcraft in Words, 2) Syntax Scarecrows, 3) Imps of Idioms, and 4) Spooks of Style, but there is also an Appendix that presents an array of word museum pieces, including the "Don't List" of the old New York Herald and Ambrose Bierce's "Write it Right."

This "Careful Writer's Guide to the Taboos, Bugbears and Outmoded Rules of English Usage" makes interesting reading for anyone curious about it. In 260 pages, indexed, it is priced at $6.95. —M.

Health Care In The Seventies — Illusions And Realities

By Luther L. Terry, M. D.

A homecoming is always a most pleasant and poignant occasion. Through the years since I left my native Red Level and my college days in Birmingham, I have been fortunate to enjoy many homecomings. Yet none has evoked more of a sense of personal pleasure and heartfelt nostalgia than the privilege of being invited to join with you today in delivering the 1971 Jerome Cochran Memorial Lecture.

Many of you here today were present on this same occasion seven years ago, when as Surgeon General of the Public Health Service, I was asked to participate in a similar manner. At that time, it seemed appropriate to share my thoughts with you concerning continuing professional education. I used then, as a catchment for my thoughts, a perfectly splendid title, *In the Panoply of Our Science.*

Strange as it may seem I have no qualms about this seeming self praise. The phrase, unfortunately, was not of my own making. The title was taken from an address on the subject of medical education delivered to this same association some 90 odd years ago. At that time, Dr. Jerome Cochran told his audience that the measure of a physician is his ability to deliver the best in scientific medical care. Only then is he wearing the vestment of honor of his profession! Only then can he lay claim to upholding and advancing the tradition of which we are all so proud!

Seven years ago when I spoke to you under this same mantle, we discussed the disproportionate gap between what is known in medical science and what is practiced—the failure in communications between the basic and clinical biomedical scientists and the medical practitioner. I asked the questions: how well are we, as practicing physicians, arrayed in the panoply of our science? Have we kept ourselves current with new knowledge and new skills? How well are we prepared to deliver the best that medical science has to offer? And I summed up my comments with the same statement of conscience Dr. Cochran expressed: we must ever be prepared to deliver the best that medical care has to offer to each of our patients. For this is our inviolate pledge to the society which gives us, in return, our professional license to practice the science—and the art—of medicine.

Though I plan to comment very briefly on the same timeless topic today, I have chosen to give a freer range to my thoughts. And in talking with you about some of the factors that we, as a profession, will be dealing with in the coming decade, I would first like to direct your attention to certain general observations about our American way of life, our opinions, our values—which I find particularly relevant.

During the last generation, particularly, the tremendous strides achieved in science, literacy and national wealth have generated an entire new frame of reference for the average American. This is reflected on a day-to-day basis in ever more extravagant expectations and desires for individual fulfillment—as well as in terms of national goals and achievements. The sky is no longer the limit—so to speak—since we have reached the moon. And human life has achieved new dimensions with the feasibility of surgical transplants of vital organs and heroic procedures to resuscitate the formerly "so-called" dead.

Expanding on the thoughts of one trench-

The Jerome Cochran Memorial Lecture—Presented at the Annual Meeting of the Medical Association of the State of Alabama, Birmingham, Ala., Friday, April 16, 1971.

ant observer of the American scene, consider the following: When we turn on the car radio as we drive to work, we expect "news" to have occurred since the morning newspaper went to press. Returning in the evening, we expect our house not only to shelter us, to keep up warm in winter and cool in summer, but to relax us, to dignify us, to encompass us with soft music and interesting hobbies, to be a playground, a theater and a restaurant.

We expect compact cars which are spacious; luxurious cars which are economical. We expect to be rich and charitable; powerful and merciful; active and reflective; kind and competitive. We expect to be inspired by mediocre appeals for excellence; and, to be made literate by reading Charlie Brown. We expect to overeat and stay thin; to be constantly on the move and yet to possess the qualities of being a good neighbor and have community ties.

We expect everybody to feel free to disagree; but, we also expect everybody to be loyal, not to rock the boat, or to take the fifth amendment. We expect everybody to believe deeply in his religion, yet not to think less of others for not believing or for having a different religious philosophy. We expect our nation to be strong and great, and vast and varied and yet prepared for every challenge. We expect our "national purpose" to be clear and simple, something that gives direction to the lives of more than two hundred million Americans, and yet obtainable in a paperback at the corner drug store for ninety-five cents.

I fully realize that I'm not revealing any secrets when I remind you that the making of the great American dream—the clothing of our collective national consciousness Madison Avenue style with these and other ambiguities and illusions which flood our daily experience has become one of the most successful business enterprises of all time.

On the plus side, many of these illusions reinforce and encourage the very factors which bring them about—ambition, the desire for a higher standard of living, a more satisfying and fulfilling life style, and so forth.

Yet, there are other aspects of these illusions which are devastating. They very effectively compromise constructive resolution of many of the very serious social, economic and health-related problems which threaten our very survival.

Part of this great illusion is that ours is the healthiest nation on earth; that we physicians are "miracle workers"; that "big business" will, of its own accord, institute the costly measures necessary to curb the massive pollution of the environment—a crime they have been guilty of for years.

Man is an egocentric being. And because the average American prides himself on his personal freedom, his chance to make it financially "if the cards are stacked right," it has been very difficult for him to fully realize that his future—and our future as a nation—is truly dependent on the advancement of the weakest among us, those with the least opportunity. And though it has been tedious and traumatic to bridge the gap between our illusions and the realities, we now recognize that such unnecessary diseases as malnutrition, tuberculosis, parasitism and privation—induced abortive physical and mental development are the inescapable companions of the culture of poverty. We now admit that these, as well as other chronic and acute diseases, are exacerbated by the co-existence of such social diseases as deterioration of the family unit, illegitimacy, unemployment, and drug abuse. We recognize that infant mortality, venereal disease, and alcoholism are two, three, and four times higher among certain segments of our population than for the nation as a whole. And we are now at a point in time when the lowest common denominator of health standards is the limiting determinant of the quality of our entire national health care system.

Another of the illusions which permeates our entire health care system is the aura of altruism that surrounds the concept of alleviating pain and suffering. Such thinking effectively inhibits a realistic appreciation of the cost factors involved.

Many of us are just appalled at a patient's lack of appreciation of the skills, effort and time involved in managing his total care as some patients seem to be at the cost of such care.

Take, for example, the indignant patient who blasted the anesthesiologist with the comment that his fee was ridiculous—just to put him to sleep for a simple operation like an appendectomy. However, the anesthesiologist promptly put things in the proper perspective when he answered: "Sir, you are mistaken. I charged you nothing to put you to sleep. My charge is for waking you up!"

Definition of health care costs has become an elaborate numbers game. There are so many intangibles involved in analyzing health care quality. What may be the return to normal ambulation for a businessman may mean enforced retirement to a professional athlete following treatment for a seemingly identical presenting fracture problem. No system has yet been devised to measure in economic terms the potential productive effort of those with debilitating chronic disease or the cost of caring for those with congenital defects induced because of lack of prenatal care or family planning advice. And it is a curious fact of basic health economics that prolonged care of the mentally and physically disabled seems to be the result of a reduction of mortality in early life.

Yet the public can no longer afford to equate one week's average salary with the average cost per day of inpatient hospital care. Surely a good deal of our effort in the next decade will be directed toward working with economists, government officials, representatives of voluntary health and consumer groups, as well as with behavioral scientists, architects and planners and the host of other specialists whose help our profession and society urgently needs to help resolve the spiraling costs of high quality medical care.

Despite the advent of automated computational methods, the basis for sound decision making continues to be the availability of accurate, consistent and timely data. The lack of such data in the health field is all too apparent. Professional societies, government and voluntary health agencies, hospital associations, insurance organizations all collect data. But they emphasize different parameters, use different time spans, and different methods of collating their information. As a result, any analysis of the situation is clouded by the use of numbers whose value is vitiated by disclaimers about accuracy, completeness and comparability.

And there are other problems too. In some states, billing data for Blue Cross subscribers are being processed by accounting methods which preclude comparison to equivalent data for Medicare and Medicaid patients. Appraisal of efficiency or productivity of laboratories is difficult because such data is not related to staffing patterns or hours of work. Rarely is information obtained on an outpatient available when such a patient is admitted in crisis.

Discussion and measurement of changes in the productivity of physicians usually focus on the number of patient visits per physician. This, quite obviously, has nothing to do with the quality of medical care delivered, the number of morbidity days saved, the unit of improvement in health, or the amount of health satisfaction realized. Our input data of the numbers of physicians and nurses, the numbers of hospital beds, the days of hospitalization and total dollars spent, just don't give us an output related to how good a job we are doing in the delivery of medical care services. Clearly, we

must find more appropriate methods to measure the quality of medical care delivered—and we must find more efficient and more effective ways to safeguard the public against those in our profession whose conduct is not worthy of the innocent trust placed in them by their patients.

According to a recent Presidental advisory commission, the major strengths of our existing health care system are the following:

A strong base of biological research and scientific medical knowledge serves continually to improve the curative and preventive capability of health practitioners;

A number of strong university medical centers with super specialists and good clinical research staffs that provide excellent services;

Direct access or access by physician referral to most kinds of medical care in the country for those with the knowledge to ask and the means to pay;

Widely dispersed community hospitals and medical offices that provide convenient work sites for physicians, dentists and surgeons;

Some group practices, frequently combined with prepaid comprehensive insurance and occasionally combined with hospital and pharmacy services;

A highly innovative and productive pharmaceutical industry;

An effective system for the control of certain environmental health hazards, particularly those affecting food sanitation;

Support for the provision of health services to indigent persons;

Professional organizations with a history of fostering high standards of quality;

The freedom to innovate and experiment with new ways of providing health services in a pluralistic system; and,

A tradition of voluntary concern and effort.

In the years to come, each of these building blocks will serve us well as we work to advance the quality of health care available for those we see as our patients, among the citizens of our communities and for the nation as a whole.

In this regard, I'm reminded of the story of the wealthy widower who sat at Sunday dinner with his three sons and their wives. "I'm sad," he said, "that none of you has presented me with a grandchild. However, I want you to know that I've taken the first step to remedy the situation. Yesterday I stopped at the bank and opened a trust fund of one million dollars for my first grandchild. Now let us give thanks!" When he raised his head from prayer a few moments later, he was the only one left at the dinner table.

Now, I don't mean to imply that we can solve our problems quite so rapidly. But there are a number of things that we can do as individual physicians and working as a corporate body to hold down costs and more effectively utilize health manpower and health care facilities.

I think the day is coming soon when our hospitals will be operating on a full schedule of services 24 hours a day and seven days a week. The sophistication of intensive care and transplant surgery requires round the clock monitoring of vital signs and biochemical parameters. We can no longer afford admitting a patient on Friday for surgery on Monday or Tuesday.

Other inefficiencies in the delivery of medical and paramedical care in the hospital result from the fact that hospital administrators have traditionally failed to recognize that poor performance and job instability are the partners of minimal salary. Numerous studies among industrial personnel point to appreciable gains in performance and financial savings to management when employees are paid a wage consistent with the expectation that the services rendered will approach an optimal level.

(Continued on Page 115)



Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Many patients on special diets will find soups they can enjoy among the more than 50 different varieties available.

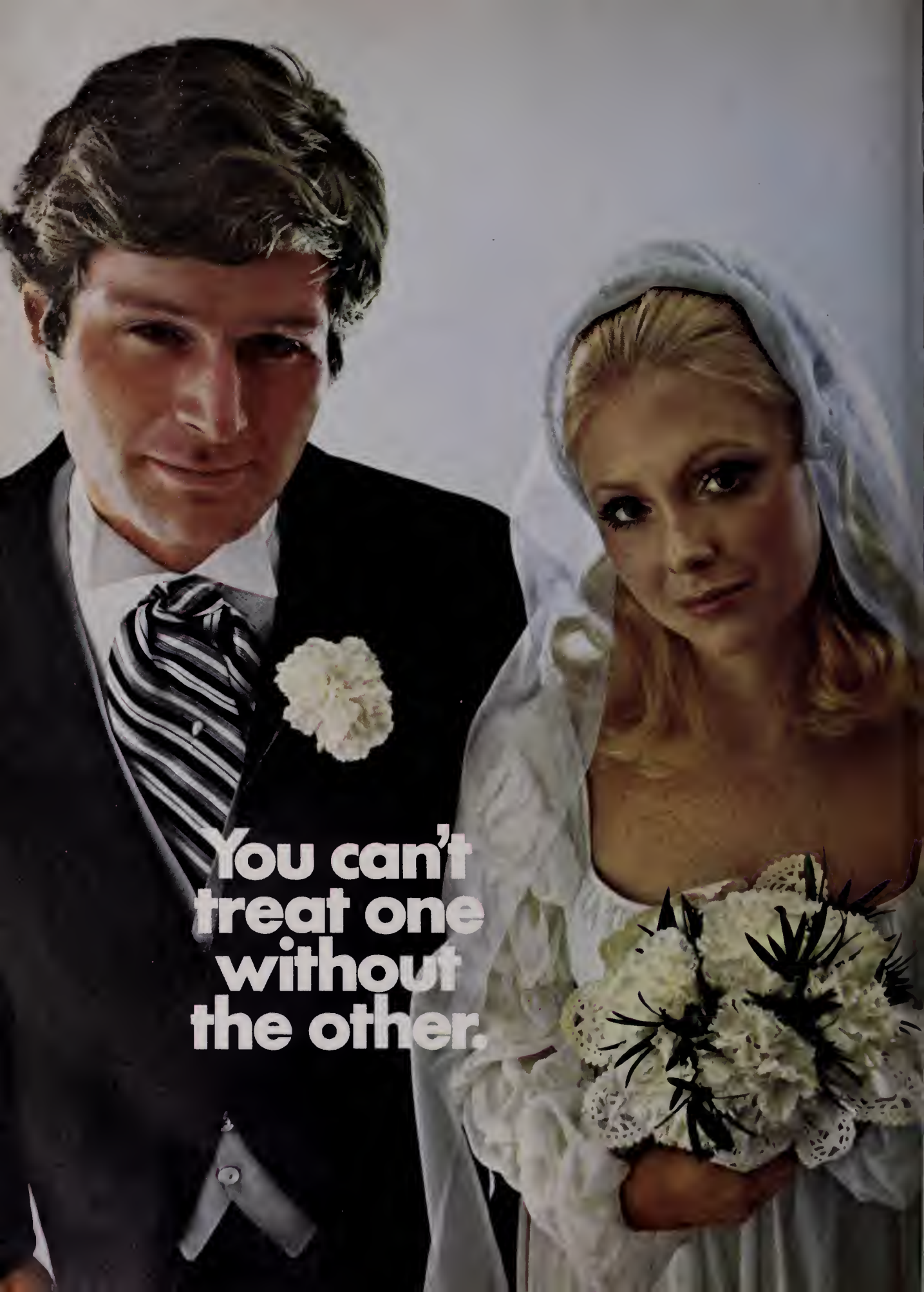


Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*


You can't
treat one
without
the other.

A triumph over trichomoniasis

The male urogenital tract is by far the main source of reinfection in trichomonal vaginitis.

It follows that neglecting to treat infected male partners of women with trichomonal vaginitis invites therapeutic failure.

Just as Flagyl is the best agent available for eradicating trichomonal infection from extravaginal sites in women, it is the only agent capable of eradicating demonstrated trichomonal infection in men.

Because of published reports of consistently high cure rates—often up to 100 percent—and a relatively low incidence of side effects, Flagyl has become the agent of choice for trichomonal vaginitis.

Indications: For the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture.

Contraindications: Evidence of or a history of blood dyscrasia, active organic disease of the central nervous system and the first trimester of pregnancy.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. There is no accepted proof that Flagyl is effective against other organisms and it should not be used in the treatment of other conditions. Exacerbation of moniliasis may occur.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, drowsiness, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, vaginal burning, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified.

Dosage and Administration: *In the Female.* One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male.* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

Dosage Forms: Oral tablets 250 mg.
Vaginal inserts 500 mg.

References available on request.

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metronidazole

care for the pair in trichomoniasis

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(Continued from Page 110)

On the one hand the public has been oversold on the benefits of hospital care, while on the other hand people spend days in hospitals unnecessarily because their health insurance does not meet the needs for medical care outside of the hospital or because no diagnostic services or surgery is performed on the weekends. Every study of benefit utilization by subscribers of prepaid health insurance shows that hospitalization use is significantly less among members whose policies include the alternate choice of outpatient services.

Unfortunately, many of our patients have good cause for their pleas to remain in the hospital rather than go to a nursing home or some other type of extended care facility. Requirements for Medicare certification are far from stringent. Yet they do form a base on which to structure optimal care for convalescent patients at lower cost when such patients no longer need hospital care. I feel that we, as physicians, can do much to upgrade the quality of medical care given at nursing homes and extended care facilities so that they take their place in an effective network of community health care facilities geared to meet the entire spectrum of health care needs of the community from intensive care to home care. *I, personally, look to the day when all community hospitals, nursing homes and extended care facilities will be affiliated with teaching institutions.*

Many physicians have mixed feelings about the merits of a community hospital survey committee. As you know, such committees function as distribution points for the disbursement of Hill-Burton funds and as coordinators of other federal programs providing funds for health care facilities at the community level. My own feeling is that physician participation on such committees on a leadership basis is mandatory. Certainly we need the advice of city planners, economists and those aware of population trends to advise about the feasibility of expanding bed facilities in a given area or the most appropriate sources of funds available to meet certain health needs. But I feel that the duplication of diagnostic or medical care services, the establishment of new services requiring extensive financing and specialized personnel, and, provision for community weekend, and evening, and emergency medical care are among the many questions that our judgment and experience as physicians give us a special priority in decision-making for the public good.

Ralph Waldo Emerson made the comment that we should not count a man's years until he has nothing else to count. Nevertheless, one can well sympathize with the elderly gentleman who was said to remark, "I can see pretty well with my spectacles, and hear pretty well with my hearing aid, and eat pretty well with my new teeth. I'm getting used to wearing a toupee, and walking with a cane, but I do miss my mind!" At the present time we are devoting a disproportionate amount of our health care dollar to citizens age 65 and over. In the immediate years to come, with this segment of our population expanding, we will have to give even more careful consideration to how we meet the health related needs of our senior citizens and how our resources can be juggled without compromising the health of our children and our working force.

Graduates from some of the newer training programs for pediatric nurse specialists, physicians' assistants, nurse-midwives and others are now in practice under physician supervision. The taking of the patient's history, preventive or well baby care and the monitoring of chronic conditions for the elderly, lend themselves very well to the substitution of auxiliary personnel who function under the direct supervision of physicians. As the need becomes ever more critical that physicians be freed to make available our specialized diagnostic and treatment skills to the greatest number of patients, I think the public must come to appreciate, with the help of our guidance, that this

change in the delivery of medical care services is motivated by a desire to make more accessible the highest quality of medical care at the lowest possible cost.

Also, as members of the medical care team today, are our "new physicians"—graduates of training programs with a broader orientation to the behavioral and psychosocial components of health and disease than we received in our training. Their education has prepared them for the future because they have been taught how to learn. We were prepared only for the past when we graduated from medical school because we were taught what to learn.

You and I are already working with these new physicians at our local hospitals or medical centers, at medical society meetings of one kind or another, and, hopefully, as informed citizens on local community action committees. We have much to learn from our younger colleagues—and I would suggest to you that those of us whose formal training period is only a dim memory will have to keep on our toes intellectually and professionally if we are to continue to merit the fraternal pedestal of honor traditionally granted by our juniors.

To conclude, may I remind you that it is a rare blending of learning and humility, incisiveness of intellect and sensitiveness of the spirit which occasionally come together in an individual who chooses the calling of medicine. Then, we have the great physician.

Recommended Vehicle for Doctors

The day for the mere novelty of the bicycle is over . . . In many sections North and West, it is fast becoming a popular vehicle for the physician in making his daily rounds. Where the smoothness of streets or roads permits of its use by anyone, to whom can it be more serviceable than the physician? It is easily made to gain ground on the usual speed of the horse and buggy in city travel . . . Unlike the horse and buggy, it does not break bridles when fire bells ring or when engines or bands of music pass by. It is not liable to the smash-ups of runaways. Its cost with all necessary equipments is about the same as that of a common-stock buggy horse, without his harness and buggy. The annual cost of keeping a good "safety bicycle" is practically nothing, for it can be housed in the doctor's office; whereas the horse and buggy require a stable, a hostler, besides the annual expense of horse-feed, shoeing, harness repairs, etc.—an annual expense of over $200. When called out at night, if the doctor has his bicycle, there is no delay and confusion about hitching up; his conveyance is ready when he is ready . . . Why should not Southern doctors be as quick to appropriate a useful idea as those of our Northern and Western cities? We feel that we are doing a real service to many of our doctor friends in thus calling their special attention to the "Hartford Safeties" the best medium-priced safety bicycle made—advertised on page 9 of this journal. (The cost of the Hartford Safeties, with cushion tires, was $105.00).

—Virginia Medical Monthly,
July 1891.

Another Nader Expose!

. . . To rely on law school students and even medical students to evaluate physician competence is bad enough. To rely on the judgment of high school girls to pass on the level of care in nursing homes and hospitals makes us wonder what Mr. Nader's real objectives may be.

In recent years there has been an increasing tendency to obtain opinions on almost any subject from those who know little about it. Presumably, the opinions of the completely ignorant are totally unbiased. We might add that they are also totally worthless.

—Massachusetts Physician



Patient Safety Subject Of AMA-AHA Conference

In May 1971 the National Conference on patient safety in the hospital, was held in Chicago, Illinois.

This conference was sponsored jointly by the American Medical Association and the American Hospital Association.

Recently, there has been increasing interest in hospital patient safety, and an alarming increase in litigation involving both hospital and physicians in new areas of legal exposure.

This has arisen partly as a result of the accidents inherent in the use of multitudes of new and more complex equipment and partly as a result of publicity seeking headlines by persons such as Ralph Nader claiming in national publications that "5,000 people a year are electrocuted in American Hospitals."

Some of the highlights of the conference follow:

It was generally agreed that some people are indeed electrocuted in our hospitals but probably a much lower number than 5,000 per year! It was also pointed out that many of our older hospitals are not adequately wired to handle the mass of complex new electrical equipment which is now in use, particularly in intensive and coronary care units. It was noted that as little as five millivolts electrical leakage could initiate a fatal arrhythmia through a cardiac catheter, the smallest electrical charge that could be felt with the tip of the tongue is 50 millivolts.

In a recent survey involving several hospitals, 25 per cent of the equipment was found to be improperly grounded. The most common cause, attaching several different units to a common ground connection, and breaking of the ground wire connected to the "male" plug. This could produce far and above more electrical leakage than would be required for a fatal accident.

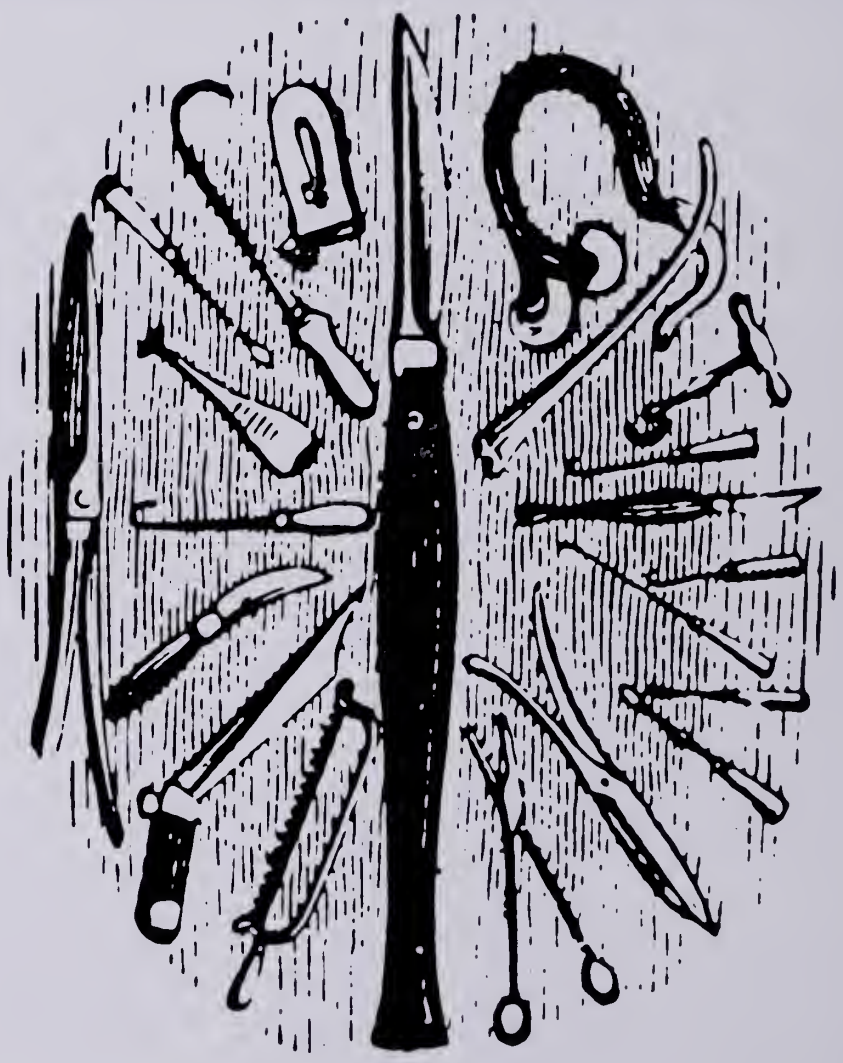
Employment of a professionally trained electrical engineer for routine inspection and maintenance of electrical equipment was recommended. It was felt that today's sophisticated electronic monitoring systems were beyond the scope of the "High School electrician" now employed by most hospitals.

Drug incompatibility and erroneous administration was discussed. A senior com-

(Continued on Page 119)

In 1852 it was reported that practicing medicine in the southern section of Alabama were "40 regular practitioners, 2 hemeopathists and hydropathists, 3 root doctors and Thompsonians, 3 general quackery and one idio-eclectopathist."

BLUE CROSS-BLUE SHIELD OF ALABAMA



(Continued from Page 117)

petent R. N. was assigned in several hospitals to monitor drug administration. It was learned that of the medication given, the wrong drug was administered in 5.6 per cent to 13 per cent of the time, varying by hospitals. When errors of time of administration were considered (over plus or minus 20 minutes) the error was well over 20 per cent average. When drug incompatibilities were considered the percentage was "astronomical."

A recommendation was made that a list of the more common drug incompatibilities should be posted at each nursing station.

The hazards of operating room anesthesia were discussed in some detail. Present electrical grounding methods were considered inadequate. The potential for accidental explosion is greater than most physicians and hospital personnel realize. Even so called non-explosive gases are explosive when in the proper portion with oxygen. Two children patients, two physician anesthetists and two surgeons were killed in an anesthetic explosion in 1963. A recent incident in Alabama with a fatality was also discussed. Operating room grounding procedures and equipment should be checked at least monthly with proper equipment to detect electrical leakage.

A representative from a large insurance carrier providing liability insurance for hospitals discussed the most common cause of claims with which his company was concerned, these were: (1) Improper injection sites causing paralysis and foot drop. (2) Falls by patients resulting in injury. Most insurance companies employ highly trained and experienced safety engineers who could be of help to hospitals on request.

Elopement and suicide were discussed as serious physical hazards to patients and legal hazards to the physician and hospital. No really practical suggestions or solutions were offered but a recommendation was made that yet another committee be formed by the hospital "a committee on elopement and suicide" to formulate methods of control in individual hospitals.

Many other areas of pertinent safety were discussed but few other definite helpful suggestions were presented (my own opinion). "The joint commission on accreditation of hospitals is going to give top priority to safety standards during the next few years." The above quotation by Dr. John Porterfield director of the Joint Commission.

All hospitals are urged to form safety committees which will function frequently and effectively. It was recommended that "so called hospital incident reports" be referred to the safety committee for review and appropriate action.

—Ira B. Patton, M. D.
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6) It carries in unity the strength for defense; and it carries in knowledge and acquaintanceship the strength for aggressive, positive action.

—Max H. Parrott, MD, Chairman,
AMA Board of Trustees in JAMA

Cesarean Section On Dying Women

The idea of saving the fetus in case of impending death of the mother was the subject of speculations not only of the physicians, but also philosophers and even lawyers since antiquity.

In the antique Greece this idea had its reflection in myths which had, doubtless, an effect on the realization of the importance of this problem in the society . . . Asclepios —the creator of the art of medicine, the son of Apollon and the nymph Coronis—was taken out of the womb of his dying mother and it was his father who performed the Cesarean section, who himself was a good physician.

—Polish Medical Science
and History Bulletin

Brief Summary of Prescribing Information–9-9/22/69. For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
Usual Dose: 1 tablet b.i.d.
Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Salutensin®
hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

BRISTOL
BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

The antihypertensive therapy that is easy to live with.*

When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

*Salutensin is usually well-tolerated (however, serious side effects can occur; see adjacent column for brief summary of prescribing information).

Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

Easy-to-live with cost of therapy. The one to two tablets a day maintenance dose makes Salutensin economical to stay with. Important, because long-term control calls for long-term therapy.

Salutensin®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.



Detailed: What Hospitals May Tell The News Media

Hospital happenings and how they should be classified for release to the news media are detailed in guidelines drafted by collaborating representatives of the Alabama Hospital Association, the Medical Association of the State of Alabama, the Alabama Press Association, and the Alabama Broadcasters Association.

The document outlines legal and ethical information, explaining what is privileged and what is not privileged, and is intended to "lay the foundation for greater inter-professional respect, cooperation and mutual confidence." And the subject is divided into four parts: 1) Cases of Public Record, 2) Accident or Police Cases, 3) Other Than Police Cases, and 4) Pictures. It follows:

1) Cases of public record are those cases which are by law reportable to public authorities, such as police, coroner, or public health officer. Requests for details other than routine (as listed in sections below) must be referred to the proper authority.

Examples of public record are:

A. Persons under arrest or held under police surveillance.

B. Any person brought to the hospital by the fire department or any law enforcement agency.

C. Cases such as shooting, stabbing, poisoning, injury by automobile, dog bites, battered children, or any other cases which are reportable to governmental agencies regardless of the mode of transportation to the hospital.

D. All deaths in which the body is turned over to the coroner.

2) ACCIDENT OR POLICE CASES

The following information may be released by the hospital on any accident or police case admitted:

Identification

Name	Sex
Address	Age
Occupation	Marital Status

Race (if requested)

Condition of Patient

Good: Vital signs are stable and within normal limits. Patient is conscious and comfortable; indicators are excellent.

Fair: Vital signs are stable and within normal limits. Patient is conscious but may be uncomfortable; indicators are favorable.

Serious: Vital signs may be unstable and not within normal limits. Patient is acutely ill; indicators are questionable.

Critical: Vital signs are unstable and not within normal limits. Patient may not be conscious; indicators are unfavorable.

Nature of Accident or Injury

BURNS

A statement may be made that the patient is burned, but the severity and degree of burns must be determined after treatment by a physician.

FRACTURES

If there is a fracture, it is not to be described in any way except to state the member involved.

DEATH

Death of a patient is presumed a matter of public record and may be reported by the hospital after the next of kin has been notified.

(Continued on Page 125)

The causes of vaginitis are multiple



Trichomonads... monilia... bacteria
You can depend on AVC—comprehensive therapy that combats all three major vaginal pathogens, alone or in combination.

AVC
Cream (aminacrine hydrachlaride 0.2%, sulfanilamide 15.0%, allantain 2.0%)

Suppositories (aminacrine hydrachlaride 0.014 Gm., sulfanilamide 1.05 Gm., allantain 0.14 Gm.)

Contraindications: Known sensitivity to sulfonomides.
Precautions/Adverse Reactions: The usual precoutions for topicol ond systemic sulfonomides should be observed becouse of the possibility of obsorption. Burning, increosed local discomfort, skin rash, urticorio ar ather manifestations of sulfonomide taxicity are reasons to discontinue treotment.
Dosage: One opplicatorful or one suppositary intravoginally once or twice daily.
Supplied: Creom – Faur-ounce tube with applicator. Suppositories – Box of 12 with applicator.

TRADEMARK: AVC AV-104 2/71 Y-149

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

AVC
The treatment is singular

A
BUILDING BLOCK
TO RECOVERY



Orenzyme® Bitabs

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

SINCE 1896

After 75 YEARS...

...Still an
INDEPENDENT
ALABAMA-OWNED
CORPORATION

MEDICAL — SURGICAL — LABORATORY — X-RAY
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WE SHOULD APPRECIATE YOUR GIVING OUR LOCAL
REPRESENTATIVE AN OPPORTUNITY TO DISCUSS
OUR PRODUCTS AND SERVICES WITH YOU



Durr Surgical Supply Company

WITH THREE LOCATIONS GIVING THE BEST POSSIBLE SERVICE TO THE MEDICAL PROFESSION

BIRMINGHAM — HUNTSVILLE — MONTGOMERY

(Continued from Page 122)

HEAD INJURIES

A simple statement may be made that the injuries are of the head. It is not to be stated that the skull is fractured until definitely determined by a physician.

INTERNAL INJURIES

It may be stated that there are internal injuries, but no information may be given as to the location of the injuries unless definitely determined by a physician.

INTOXICATION

No statement may be made as to whether the patient is intoxicated or under the influence of alcohol or drugs.

POISONING

No statement may be made concerning either motivation or circumstances surrounding a patient's poisoning.

SEXUAL ASSAULT

No statement may be made concerning the nature of the incident or injuries. Condition of the patient may be given.

SHOOTING OR STABBING

The number of wounds and their location may be stated if definitely determined by a physician. No statement may be made as to how the shooting or stabbing occurred.

SUICIDE OR ATTEMPTED SUICIDE

No statement may be made that there was a suicide or an attempted suicide.

UNCONSCIOUSNESS

If a patient is unconscious when he is

(Continued on Page 126)

(Continued from Page 125)

brought to the hospital, a statement of this fact may be made.

3) OTHER THAN POLICE CASES

If the patient is conscious and can communicate with the doctor or nurse in charge, or with relatives, he should be asked whether he will permit any information to be given, and his decision is final. If the patient agrees to permit information to be given, the conditions are identical to those quoted above. For information concerning a child or patient who is unconscious or unable to communicate with those in attendance, information must be released only with the consent of the guardian or someone authorized to speak for the patient.

Attending Physician

Hospital personnel may state to the representatives of the news media the name of the attending physician of private patients, but the news media must not use the name of the physician without his consent.

Public Figures

The presence in the hospital of certain public figures, or a patient who has become well known by the nature of his hospitalization, should be confirmed by the hospital. The release of further information should be authorized by the patient (or a spokesman for the patient) and the physician, for such news is in the public interest and the patient is thus assured of the release of accurate information from an authorized source. In instances involving widespread public interest, a member of the staff in charge of the case should arrange for periodic bulletins as to the patient's condition.

When extenuating circumstances merit that no confirmation or information be released, the hospital spokesman should explain the situation to the news media and request their cooperation in withholding the information. News media representatives should respect the request.

Deaths

The death of a patient is a matter of public record, and if a patient is of sufficient prominence to interest the news media, the hospital should indicate its cooperation by notifying them, following notification of next of kin.

4) PICTURES

When the news media requests the privilege of photographing a patient in the hospital, such permission should be given only if, in the opinion of the doctor in charge of the case, the patient's condition will not be jeopardized, and if the patient (or in the case of a minor, the parent or guardian) has signed a consent form authorizing the photograph.

Not just a motel
it's a Guest House

. . . with 171 handsome rooms designed for your comfort and convenience. A center-of-everything location including Birmingham's University of Alabama Medical Center . . . making The Guest House a favorite of Doctor's wives and in-town outpatients. Superb dining, dancing and nightly entertainment. Come stay with us often.

THE RESTAURANT
THE PLAYROOM • CYPRESS ROOM
CONVENTION FACILITIES

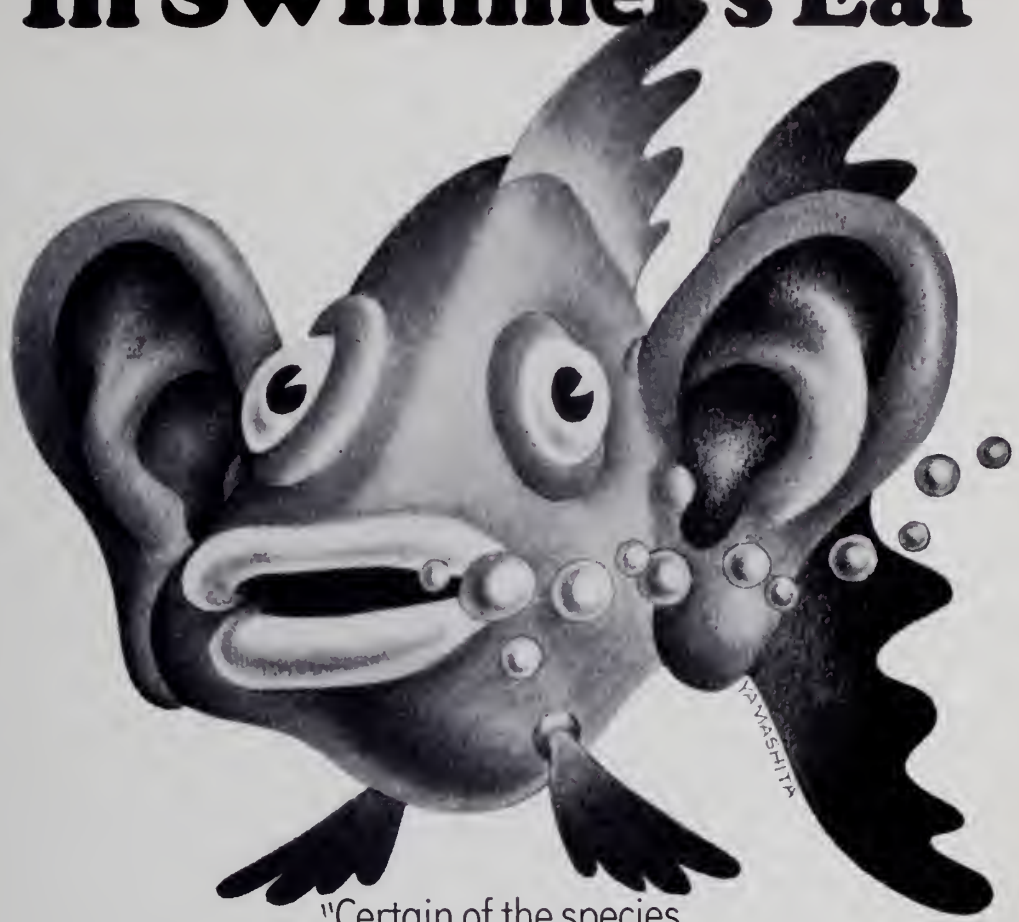


The Guest House
MOTOR INN

PHONE 324-8653
18TH ST. &
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BIRMINGHAM, ALABAMA

"Where the Action Is!"

In Swimmer's Ear



"Certain of the species
are apt to encounter aural
difficulties after engaging in various
natatory pursuits."

Furacin® Otic

(nitrofurazone) antibacterial/anesthetic/antifungal

Formula: Contains (w/w) 0.2% FURACIN, brand of nitrofurozone, 0.375% Micafur®, brand of nifuraxime, and 2% diperadan hydrochloride dissolved in water-soluble, nondrying, hygroscopic polyethylene glycol.

Indications: For treatment of bacterial otitis externa, bacterial otitis media and otomycosis. In otitis media, this preparation is not effective if the tympanic membrane is intact.

FURACIN (nitrofurozone) and Micofur (nifuraxime) are active against a variety of grom-positive and grom-negative organisms. Activity versus Pseudomonas sp. is limited to certain strains. Micofur (nifuroxime) is active against Candida (Monilia) albicans.

Precautions: Sensitization may occur with prolonged use and is more likely to develop in eczematous otitis externa. To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.

This preparation is not indicated for use in treatment of cholesteatoma, where surgical intervention is necessary.

Supplied: Bottle of 15 cc. with dropper.

® Originators and Developers of The Nitrofurans
EATON LABORATORIES
Division of The Norwich Pharmacal Company
NORWICH, NEW YORK 13815

When irritable colon feels like this



...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distension and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

What Can Doctors Do?

Indiana's medical community is concerned about the growing misuse and abuse of drugs . . . There are a number of things that can be done:

1) Realize that drugs do flow in your community. Don't panic! Don't moralize! Don't preach!

2) Know the facts about drug abuse; facts dispel fear.

3) Participate and/or cooperate in community programs, both school and adult.

4) Promote use of ISMA 1970 Hoosier Teen Health Happening films and audiotapes; use AMA materials and pamphlets, too.

5) Promote a central drug committee and provide a confidential phone by which one of its members can be reached.

6) Work with pharmacists to control multiple prescriptions by one person.

7) Take the lead whenever possible in drug education to show the community that its doctors care.

President's Message
The Journal of the Indiana
State Medical Association.

Twin Objectives

The Committee on Public Relations, which held eight regularly scheduled meetings during the 1970-71 term, has attempted to address itself to twin goals: "1) to improve the public image of the physician and (2) to better communications between the membership of the medical society and the officers.

—New York Medicine.

For Insomnia... one capsule for the rest of the night

NOLUDAR® 300



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



The Bradley Center --- for the problems of living

An all new homelike open psychiatric residence on a lovely five-acre tract, centrally located within the community, providing a comprehensive range of continuous services, including in-patient, day care, and outpatient treatment. Each patient participates in an extensive and intensive treatment program, based almost exclusively upon multiple psychotherapeutic encounters. These include individual psychotherapy, group psychotherapy, the nursing milieu, occupational therapy, recreational therapy, topical small group discussions, and other group activities in the Center, as well as in the community, depending on individual needs and interests. Medications are prescribed when appropriate.

Any individual may be admitted who, in the opinion of the medical staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible family member.

Accredited by the Joint Commission on Accreditation of Hospitals.

Leonard T. Maholick, M. D.
Medical Director

Maj. Gen. (ret.) Howard Snyder
Administrator

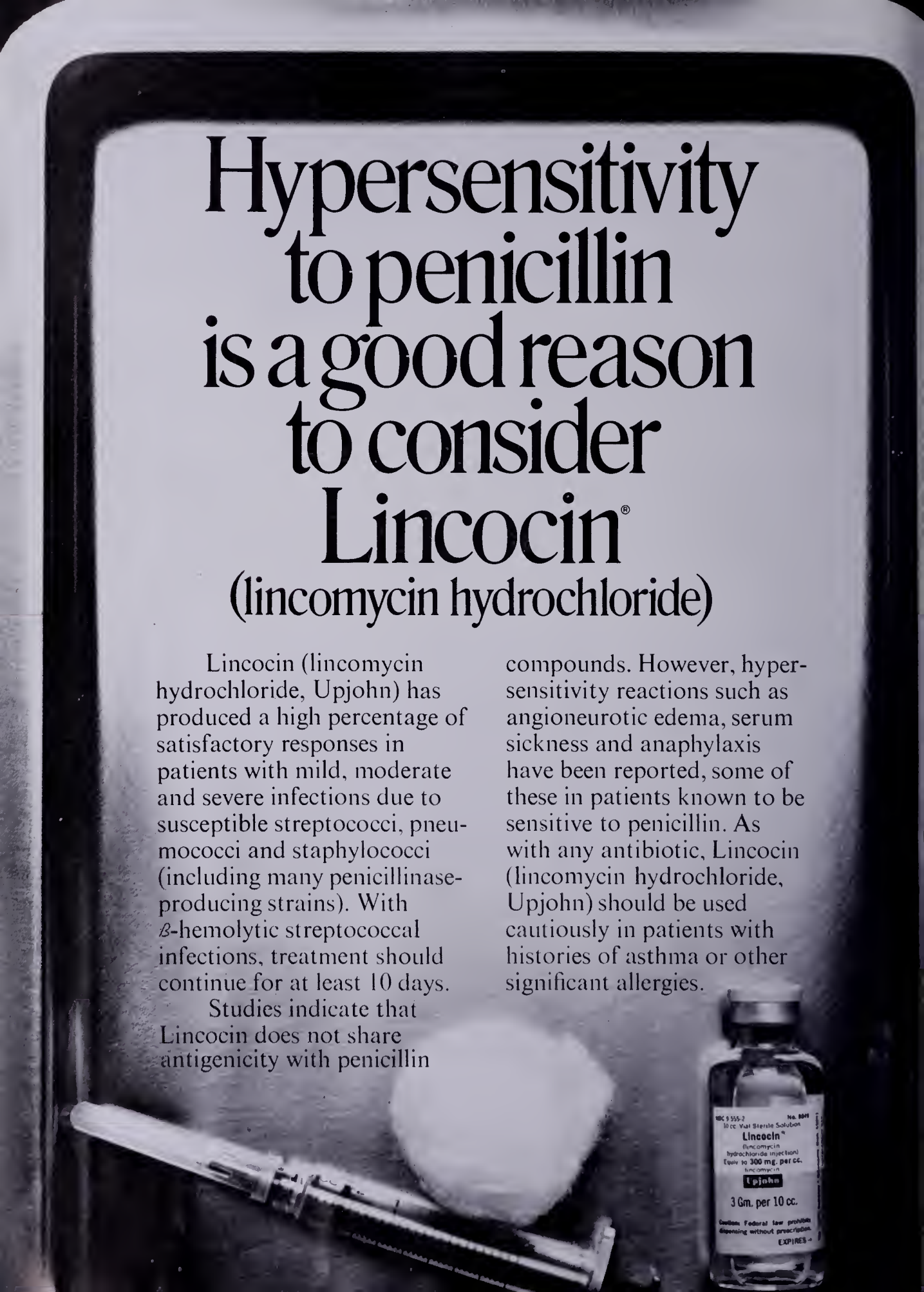
THE BRADLEY CENTER, INC.
2000 Sixteenth Avenue
Columbus, Georgia 31901
Area Code 404 324-4882

Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With β-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



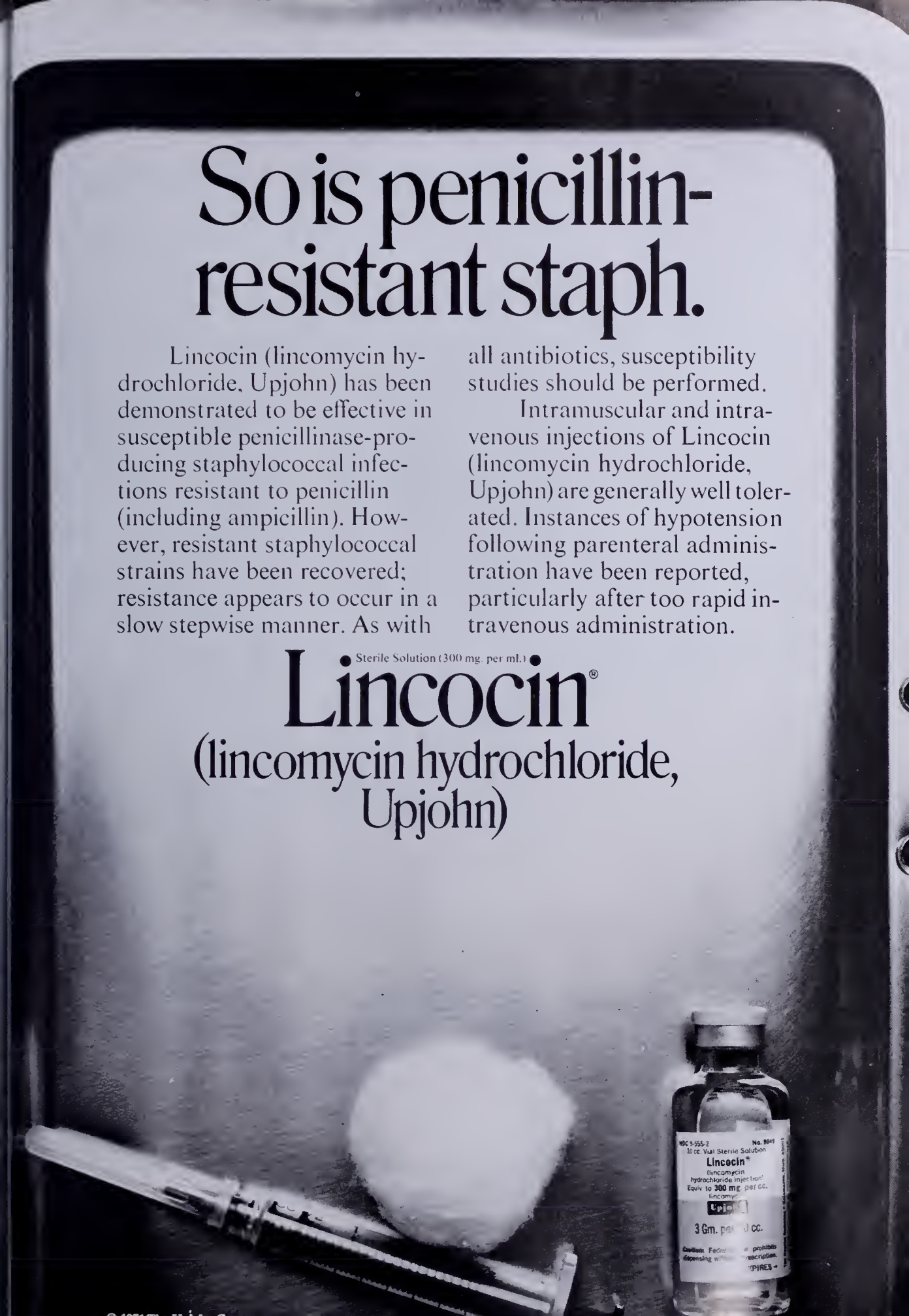
So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

Sterile Solution (300 mg. per ml.)

Lincocin®
(lincomycin hydrochloride, Upjohn)



Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.



Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. *Sympathomimetic cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastraintestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulacytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T 107/4/71/U.S. PATENT NO. 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

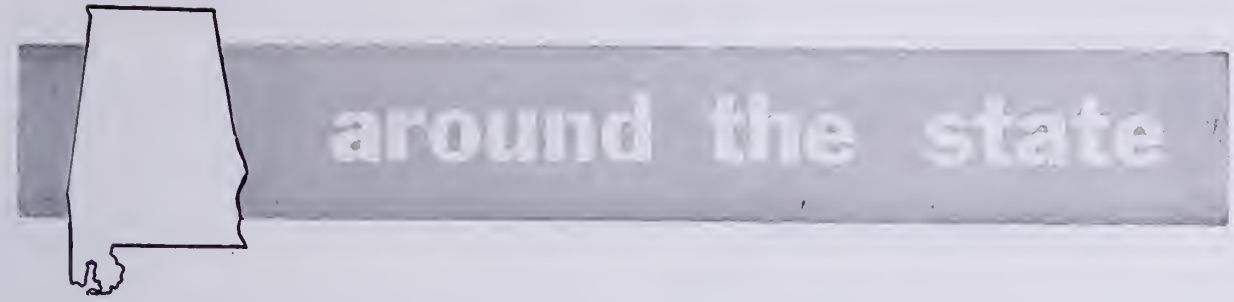
Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Q103 2/71

Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps



Vital Statistics

NEW MEMBERS

Lee County

Norton, George Harry, b 36, mc Emory '62, recip. Georgia '70, Medical Arts Center, Opelika, Alabama 36801. ALR.

Montgomery County

Matthews, Hubert Irvin, b 36, mc Duke University '61, recip. North Carolina '71, 2119 East South Boulevard, Montgomery, Alabama 36111. D.

Morgan County

Lay, James Vernon Max, b 19, mc University of Texas '43, recip. Texas '71, Medical Department, Monsanto Company, P. O. Box 2204, Decatur, Alabama 35601. Ind.

CHANGES OF ADDRESS

Barbour County

Yohn, Kenneth C., present Eufaula, to 810 West Washington Street, P. O. Box 554, Eufaula, Alabama 36027.

Calhoun County

Durden, John D., present Anniston, to 710 Highland Avenue, Anniston, Alabama 36201.

Leonard, Russell J., present Anniston, to 1120 Christine Avenue, Anniston, Alabama 36201.

Jefferson County

Bearman, Alvin J., present Birmingham, to P. O. Box 4277, 7916 South 2nd Avenue, Birmingham, Alabama 35206.

Carter, Robert W., present Birmingham, to 4128 Sharpsburg Drive, Birmingham, Alabama 35213.

Hardy, Walter B., present Birmingham, to 39 Hanover Circle, Birmingham, Alabama 35205.

Lewis, Thomas K., Sr., present Gulfport, Mississippi, to 6221 Audubon Drive, Pensacola, Florida 32504.

Packard, John M., present Birmingham, to 1108 South 20th Street, Birmingham, Alabama 35205.

Madison County

Ennis, John M., present Huntsville, to 401 Sivley Road, S. W., Huntsville, Alabama 35801.

Marshall County

Venning, Edward W., present Guntersville, to Box 188, 521 Broad Street, Guntersville, Alabama 35976.

Montgomery County

Hughes, William D., present Montgomery, to 1739 Croom Drive, Montgomery, Alabama 36106.

Morgan County

Keeton, William C., present Decatur, to 407-4th Avenue, S. E., P. O. Box 2211, Decatur, Alabama 35601.

Smith, John T., Jr., present Decatur, to P. O. Box 2211, Decatur, Alabama 35601.

Wiley, James B., Jr., present Decatur, to 407-4th Avenue, S. E., P. O. Box 2211, Decatur, Alabama 35601.

NEW TELEPHONE NUMBERS

Alexander, William W., Lawrence ... 974-8456
Bahar, David, Tuscaloosa ... 553-8320
Ditoro, Peter, Madison ... 536-7358
Elliott, Robert L., Jr., Calhoun ... 237-1624
Freeman, Arthur M., Jr., Jefferson 322-8753
Friedman, Benjamin, Jefferson ... 933-0946
Gillis, Samuel P., Jefferson ... 933-6440
Hall, Garland C., Jr., Lawrence ... 974-0646
Harris, Edward A., Jefferson ... 933-6944
Heard, Charles C., Tallapoosa ... 825-4633
Hollobaugh, Samuel L., Lawrence ... 974-0606
Irwin, Willard W., Lawrence ... 974-0606
Lay, James V. M., Morgan ... 552-2011
Matthews, Hubert I., Montgomery 288-0193
Norton, George H., Lee ... 749-8249
Packard, John M., Jefferson ... 934-5394
Rhyne, Robert H., Jr., Lawrence ... 974-0601
Scott, Walter F., Jr., Jefferson ... 933-8221
Shamblin, William G., Tuscaloosa ... 553-3760
Spira, Henry, Jefferson ... 933-7803
Strange, Charles E., Calhoun ... 435-7634
Watson, Horace E., Jefferson ... 788-3309
Yohn, Kenneth C., Barbour ... 687-2471

ADD SPECIALTY

Butler County

Davis, William E., L. V. Stabler Memorial Hospital, Greenville, Alabama 36037. Pd.

McCraw, Edward F., 300 College Street, Greenville, Alabama 36037. I.

Stabler, Paul A., Oak Street, Greenville, Alabama 36037. I.

Calhoun County

Ballard, Fred C., 721 East 10th Street, Anniston, Alabama 36201. ObG.

Elliott, Robert L., Jr., 411 East 9th Street, Anniston, Alabama 36201. S-ThS.

Morrow, John A., Medical Arts Building, Anniston, Alabama 36201. R.

Reaves, John E., P. O. Box 1516, 1029 Christine Avenue, Anniston, Alabama 36201. Oph.

Smith, Samuel R., 429 East 9th Street, Anniston, Alabama 36201. Or.

Stewart, James P., 721 East 10th Street, Anniston, Alabama 36201. ObG.

Stout, Bill D., 329 East 10th Street, Anniston, Alabama 36201. I.

Strange, Charles E., 115 East Francis Avenue, Jacksonville, Alabama 36265. GP.

Chambers County

Guin, Dan M., Draper Building, Lanett, Alabama 36863. GP.

Cherokee County

Adams, John G., Cedar Bluff Road, Centre, Alabama 35960. GP.

Clarke County

Larrimore, Lennox W., 411 Wilson Avenue, S. W., Thomasville, Alabama 36784. GP.

Colbert County

Weber, Alvin J., III, 907 Woodward Avenue, Muscle Shoals, Alabama 35660. I.

Covington County

Spurlin, Richard J., Opp, Alabama 36467. GP.

Dale County

Ouzts, Len M., Dale County Hospital, Ozark, Alabama 36360. R.

Dallas County

Cox, Clyde B., Jr., 611 Broad Street, Selma, Alabama 36701. S-ThS.

Downard, Joe T., New Vaughan Memorial Hospital, P. O. Box 328, Selma, Alabama 36701. R.

Hagood, Joseph H., Jr., New Vaughan Memorial Hospital, P. O. Box 328, Selma, Alabama 36701. R.

Reeves, Hugh M., Swift Building, Selma, Alabama 36701. ALR.

DeKalb County

Isbell, Charles A., 1209 Forrest Avenue North, Fort Payne, Alabama 35967. Pd.

Elmore County

Roberts, Gerald R., Tallassee, Alabama 36078. GP.

Russell, Melvin D., Tallassee, Alabama 36078. GP.

Escambia County

Monzingo, George F., P. O. Box 956, Brewton, Alabama 36426. R.

Wager, William F., P. O. Drawer 1056, Atmore, Alabama 36502. R.

Etowah County

Holley, Hilmon D., Jr., 948 Forrest Avenue, Gadsden, Alabama 35901. Pd.

Isbell, Euclid A., Jr., 1039 Forrest Avenue, Gadsden, Alabama 35901. ALR.

Miles, Gordon L., Medical Arts Building, 303 Bay Street, Gadsden, Alabama 35901. Path.

Suttle, Roger C., Jr., 701 Noojin Building, Gadsden, Alabama 35901. ALR.

Franklin County

Durant, Guy C. M., 101 East Montgomery, Russellville, Alabama 35653. ObG.

Jackson County

Elmore, Horace L., Box C-3, Bridgeport, Alabama 35740. GP-S.

Gibson, Thomas A., P. O. Box 927, Scottsboro, Alabama 35768. R.

Jefferson County

Abernathy, Frank, Jr., Box 2727, Birmingham, Alabama 35202. GP.

Carmichael, Robert G., Professional Office Building, 800 Montclair Road, Suite 709, Birmingham, Alabama 35213. N.

Chapman, Lee B., 924 South 19th Street, Birmingham, Alabama 35205. S.

Erdemir, Hamdi A., 1919-7th Avenue South, Birmingham, Alabama 35233. Anes.

Friedman, Benjamin, 700 South 19th Street, Birmingham, Alabama 35233. C-I.

Gillis, Samuel P., 1815-11th Avenue South, Suite 4, Birmingham, Alabama 35205. S.

Goral, Cemal, Lloyd Noland Hospital, Fairfield, Alabama 35064. I.

Gutierrez, Francisco A., 1919-7th Avenue South, Birmingham, Alabama 35233. Anes.

Hazigeorgiou, George P., 2160 Highland Avenue South, Birmingham, Alabama 35205. S.

Jackson, David H., 1919-7th Avenue South, Birmingham, Alabama 35233. C.

Luther, Jerry R., 216 Professional Office Building, 800 Montclair Road, Birmingham, Alabama 35213. R.

McGowan, Eoline I., 1919-7th Avenue South, Birmingham, Alabama 35233. Path.

Oberman, Albert, 1919-7th Avenue South, Birmingham, Alabama 35233. Preventive Medicine.

Peacock, Thomas H., Jr., 1316 South 19th Street, Birmingham, Alabama 35205. S.

Salter, Merle M., 1919-7th Avenue South, Birmingham, Alabama 35233. R.

Scruggs, Thomas M., 1615 North 25th Street, Birmingham, Alabama 35234. N.

Simpkins, Thomas E., Jr., 652 Lomb Avenue, Birmingham, Alabama 35211. ALR.

Soto, Benigno, 1919-7th Avenue South, Birmingham, Alabama 35233. R.

Stafford, George T., III, Lloyd Noland Hospital, Fairfield, Alabama 35064. Resident.

(Continued on Page 141)

when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

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Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.
Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.
Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.
Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.
Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.
Supplied *Tablets: 2 mg.*, scored—bottles of 100./ *5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.
For additional product information, see your Upjohn representative or consult the package circular.

Upjohn The Upjohn Company, Kalamazoo, Michigan
JA68-7627-R MED B-5-S (LQX)

AROUND THE STATE

(Continued from Page 139)

Thomas, Edward L., 800 Montclair Road, Birmingham, Alabama 35213. Or.

Wade, Stanley A., Jr., Lloyd Noland Hospital, Fairfield, Alabama 35064. Resident.

Watson, Horace E., 406 Professional Building, 801 Princeton Avenue, Birmingham, Alabama 35211. Or.

Lee County

Curry, Benjamin D., 4 Medical Arts Center, Opelika, Alabama 36801. Pd.

Fuller, George E., 519 Terracewood, Opelika, Alabama 36801. Anes.

Haynes, Columbus D., 121 North 20th Street, Opelika, Alabama 36801. S.

Himmelwright, James P., Medical Arts Building, Opelika, Alabama 36801. I.

Mardre, Robert B., Jr., 1706 Hilltop Circle, Opelika, Alabama 36801. R.

Schlichter, Frank J., Jr., P. O. Box 2425, Opelika, Alabama 36801. S.

Limestone County

Holt, Douglas C., West Market Street, Athens, Alabama 35611. GP.

Roberson, Charles D., Sanders Street, Athens, Alabama 35611. S.

Macon County

Dowe, Calvin R., 108 Reed Avenue, Tuskegee Institute, Alabama 36088. I.

Williams, Joshua W., Drawer II, Tuskegee Institute, Alabama 36088. Retired.

Madison County

Ditoro, Peter, 930 Franklin Street, Suite 205, Huntsville, Alabama 35801. GP-S.

Litkenhous, Edward E., Jr., Huntsville Hospital, Huntsville, Alabama 35801. Path.

Ray, Harold C., 905 Madison Street, Huntsville, Alabama 35801. R.

(Continued Next Page)

Spraul, James H., A&TS-MS-M, Marshall Space Flight Center, Alabama 35812. Ind.

White, Morris W., 204 Governors Drive, S. W., Huntsville, Alabama 35801. GP.

Marengo County

Perret, Norbert E., Jr., Box 774, Demopolis, Alabama 36732. GP.

Marion County

Fuson, Edna P., 117 North Main Street, P. O. Box 548, Winfield, Alabama 35594. Pd.

Mobile County

Condom, Jaime E., Searcy Hospital, Mount Vernon, Alabama 36560. GP.

Fonde, Edgar C., 2451 Fillingim Street, Mobile, Alabama 36617. Path.

Foster, LeBaron A., 1453 Davis Avenue, Mobile, Alabama 36603. GP.

Martin, Philip D., Jr., 1803 North Wilson Avenue, Prichard, Alabama 36610. ObG.

O'Gwynn, John C., III, 120 Louiselle Street, Mobile, Alabama 36607. Oph.

Reed, Robert A., Mobile General Hospital, 2451 Fillingim Street, Mobile, Alabama Alabama 36617. R.

Roberts, James W., Jr., 3920 Airport Boulevard, Mobile, Alabama 36608. Pd.

Snodgrass, Phillip A., 2451 Fillingim Street, Mobile, Alabama 36617. S. (Resident)

Stone, Donald L., P. O. Box 7544, Mobile, Alabama 36607. R.

Montgomery County

Underwood, Solomon J., 1031 Oak Street, Montgomery, Alabama 36108. I.

Morgan County

Brown, William A., Jr., Medical Arts Building, West Pine Street, P. O. Box 1066, Hartselle, Alabama 35640. GP.

(Continued on Page 144)

Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

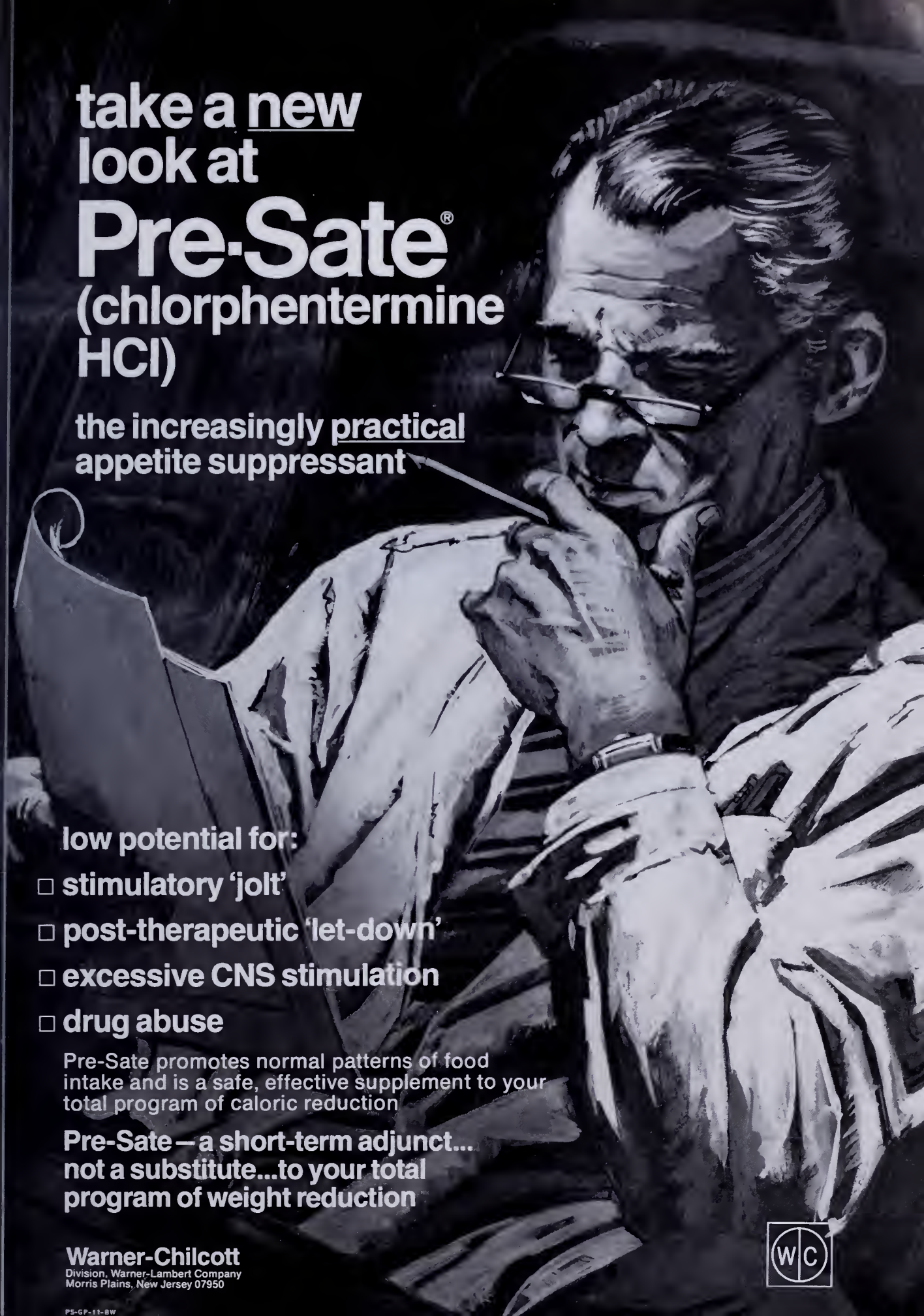
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.


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Pre-Sate®
(chlorphentermine HCl)
the increasingly practical appetite suppressant
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Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction
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Division, Warner-Lambert Company
Morris Plains, New Jersey 07950
W C
PS-GP-11-BW

(Continued from Page 142)

Ford, Lawrence G., 1501-7th Street, S. E., Decatur, Alabama 35601. N.

McCain, Paul P., P. O. Box 1383, Decatur, Alabama 35601. ObG.

Moore, James D., 1501-7th Street, S. E., Decatur, Alabama 35601. Or.

Owens, Samuel B., 1501-7th Street, S. E., Decatur, Alabama 35601. N.

Vaughan, Betty W., P. O. Box 850, Decatur, Alabama 35601. Pd.

Perry County

Merkle, Bobby C., Uniontown, Alabama 36786. GP.

Tallapoosa County

Heard, Charles C., 203 Oak Street, Dadeville, Alabama 36853. GP.

Warr, Lloyd C., Alexander City, Alabama 35010. I-GE.

Tuscaloosa County

Alexander, Sydenham B., Student Health Center, University, Alabama 35486. I.

Bahar, David, 1101-6th Avenue East, Tuscaloosa, Alabama 35401. I.

Koenemann, Lynn C., Druid City Hospital, Tuscaloosa, Alabama 35401. Path.

Quenzer, Fred A., Student Health Center, University, Alabama 35486. S.

Shamblin, William G., 24 Audubon Place, Tuscaloosa, Alabama 35401. GP. (Retired)

Shamblin, William R., 518-10th Street East, Tuscaloosa, Alabama 35401. S-ThS.

Sneed, David G., Druid City Hospital, Tuscaloosa, Alabama 35401. GP.

Taylor, William A., 922-5th Avenue East, Tuscaloosa, Alabama 35401. Or.

Thomas, George E., Druid City Hospital, Tuscaloosa, Alabama 35401. S.

Wheeler, Joe Ann L., Student Health Center, University, Alabama 35486. ObG.

White, Roy S., Druid City Hospital, Tuscaloosa, Alabama 35401. Pd.

Walker County

Russell, Bruce W., Box 426, Sumiton, Alabama 35148. GP.

CHANGE OF SPECIALTY

Jefferson County

Spira, Henry, 1018 South 17th Street, Birmingham, Alabama 35205. P.

Ward, William Q., 1032 South 18th Street, Birmingham, Alabama 35205. D.

NAME CORRECTION

Jefferson County

Carter, Robert Walter (not Walker), 4128 Sharpsburg Drive, Birmingham, Alabama 35213.

No Boundaries In Medicine

Medicine gives us a vision of what the world could be; it embodies the hope of the great community, in which man unites to master nature and harnesses its laws to the service of the entire human race. For there is no Jewish or Aryan medicine, there is no German, Italian, or British physiology, there is no color line in endocrinology, no class war in chemotherapy. In the roster of medical discovery, it is difficult to find a great contribution that was made by one man working alone, or even by the scientists of one nation depending on their own unaided researches. Everywhere science works on a communal basis; the findings of one worker are freely published for the information of all, and each discovery is but a capstone placed on the previous contributions of scores and hundreds of other workers representing many nations and many races.

—George W. Gray
The Advancing Front
of Medicine, 1941

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IN EMPHYSEMA



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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

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Manufacturers of Ethical Pharmaceuticals

Nothing new about Synirin other than ...it's a stable, uncoated, fast disintegrating tablet of aspirin with pentobarbital potentiating the aspirin analgesia.

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ASPIRIN 5 GR.—PENTOBARBITAL 1/8 GR.

ETHICAL ANALGESIA (economical if prescribed in 100 units with privilege of refills)

PRESCRIBING INFORMATION: To relieve tension headaches and arthritic pains, 2 tablets q 4 h. Aspirin and pentobarbital begin their action promptly, continuing for about 4 hours. The small pentobarbital content gives no perceptible sedation. Pentobarbital is destroyed by the body and there is no accumulation. Synirin will supply any aspirin therapy with equal safety. Use aspirin with caution in peptic ulcer.

EACH UNCOATED TABLET CONTAINS:

Aspirin .....325 mg. (5 gr.)
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*May be habit forming.

Federal law prohibits dispensing without prescription

DISPENSED IN BOTTLES OF 100 AND 1000 TABLETS

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A clinical supply of this new aspirin formulation may be requested.

On Occupational Health

With an array of subjects ranging from "Rural Traffic Safety" to "Drug Abuse in Industry," from "Uranium Mining and Lung Cancer" to "Location, Survival and Evacuation of Aircraft Accident Victims," from "Physical Fitness and Cardiac Rehabilitation" to "Non-Chemical Methods for Pest Control," the 31st Annual Congress on Occupational Health will be held Sunday and Monday, Aug. 29-30, at Jackson Lake Lodge, Grand Teton National Park, Wyoming.

Leaders in related subjects from a dozen different states are scheduled on this two-day program of the American Medical Association's Council on Occupational Health, of which George F. Wilkins, M. D., of Boston, is chairman. The program will open with welcoming talks by Wyoming's Gov. Stanley K. Hathaway; Fenworth M. Downing, M. D., president, Wyoming State Medical Society; and Wesley W. Hall, M. D., AMA president.

A feature of the Sunday Physicians' Award Luncheon will be a talk by Capt. James A. Lovell, Jr., commander of Apollo XIII.

Peace in Political Arena

For the first time in my memory the South Dakota State Medical Association can relax after a Legislative Session and not have to lick its wounds. Every Bill which was introduced at the request and with the approval of the Council was passed. Most of the Bills which the Council endorsed were enacted into legislation, and most of those to which we objected, were defeated. This is a most enviable record for which no one officer or member of the Association may take exceptional personal credit, for it was done by all Officers and Members working together for the best interests of our Profession, our Association and for the Public Good.

—President's Report, March 1951
South Dakota Journal of Medicine

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WILLINGWAY

311 Jones Mill Road
Statesboro, Georgia

LONG TERM THERAPY OF DRUG DEPENDENCY CONDITIONS

Willingway Hospital is a new facility, the first complete hospital to be constructed under the Georgia Hospital Rules and Regulations, revision of November 24, 1969, authorizing residential type units.

Located at the city limits in east Statesboro on an eleven acre tract of woodland in a quiet, secluded area containing a lake, the single story, multi-level hospital consists of a detoxification section and a residential care section. The detoxification unit is equipped and staffed for the withdrawal treatment of any type of intoxication including alcohol, narcotics, sedatives, tranquilizers and other drugs or combinations.

The residential care unit is composed of 26 private rooms with private baths convenient to a comfortable lounge and arranged to achieve an intimate home-like atmosphere. All living units are individually decorated and furnished. No two are alike. Wall to wall carpet throughout.

There is a large day room, inside and outside patios, a dining room where home cooked meals are served, a library and conference rooms. The building is all electric, completely air conditioned with individual controls, and is protected by a modern sprinkler system in all areas.

Male and female patients are admitted to the detoxification unit for withdrawal. When this phase is completed, they are transferred to the residential care unit for continuation of rehabilitative therapy.

The Willingway treatment program operated successfully at another location in Statesboro for four years before moving to the new facility.

Requirements for admission. To be admitted all new patients must agree to the following:

1. Stay 28 days.
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(phenformin HCl)
timed-disintegration capsules 50 mg.

lowers elevated blood sugar

How to prescribe DBI®-TD (phenformin HCl)

To start with DBI-TD

Week 1 1 capsule with breakfast may be effective, or a second capsule may be given with the evening meal.

Week 2 Continue effective DBI-TD dosage. If necessary, add an additional capsule to the A.M. or P.M. dose.

Thereafter Continue effective DBI-TD dosage.

To transfer from sulfonylurea therapy to DBI-TD alone: The first week, withdraw sulfonylurea; start with DBI-TD as indicated in the chart.

To transfer from sulfonylurea therapy to combined therapy with DBI-TD: The first week, continue dosage of sulfonylurea; add DBI-TD as indicated in the chart. When effective regulation of diabetes is attained, sulfonylurea may be reduced and/or withdrawn.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary. **Contraindications:** Diabetes mellitus that can be regulated by diet alone; juvenile diabetes that is uncomplicated and well regulated on insulin; acute complications of diabetes (metabolic acidosis, coma, infection, gangrene); surgery; severe hepatic disease; renal disease with uremia; cardiovascular collapse, after disease states associated with hypoxemia. **Warning:** Use during pregnancy is to be avoided. Until adequate data on the effects of DBI on the human fetus are available, such use can be considered experimental. **Precautions: Starvation Ketosis,** which must be differentiated from "insulin lack" ketosis, and is characterized by ketonuria in spite of relatively normal blood and urine sugar, may result from excessive DBI therapy, excessive insulin reduction or insufficient carbohydrate intake. Adjustment of DBI-TD or insulin dosage, or supplying carbohydrates, alleviates this state. DO NOT GIVE INSULIN WITHOUT FIRST CHECKING BLOOD AND URINE SUGARS. **Lactic Acidosis:** DBI is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, it is recommended that periodic determinations of ketones in the blood and urine be made in diabetics previously stabilized on DBI, or DBI and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. DBI should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. **Hypoglycemia:** Although hypoglycemic reactions are rare when DBI is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with DBI. **Adverse Reactions:** Principally gastrointestinal, occurring more often at higher dosage levels; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, DBI should be immediately withdrawn. Although rare, urticaria and gastrointestinal symptoms following excessive alcohol intake have been reported. **Dosage:** 1 to 3 DBI-TD 50 mg. capsules daily. **FSN 6505-724-6331. Also Available:** DBI tablets 25 mg. **Supplied:** Bottles of 100 and 1000.

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Lest We Forget: Dorothea Lynde Dix -- 1802-1881

"A Lady with a Mission"

> "I shall see their chains off. I shall take them into the green fields, and show them the lovely little flowers and the blue sky, and they shall play with the lambs and listen to the song of the birds, 'and a little child shall lead them.' "*

Near the foot of a gentle slope in a quiet little cemetery in Cambridge, Massachusetts, is a small gravestone engraved with only the name, "Dorothea L. Dix." Dates and epitaph are missing from the stone, but Miss Dix left her epitaph in the hearts of men and women everywhere. Unfortunately, her long and courageous fight for the humane treatment of the mentally ill is now all but forgotten.

Very early in life she became aware of an appalling need for the proper care of the insane in this country. When her father became mentally ill, Dorothea and her two younger brothers were sent to live in Boston with her grandparents.

Dorothea never married. She founded a school for the poor children of Boston, but after observing the deplorable conditions of the mentally ill confined in the unheated basement of a Boston jail, she soon determined her "mission" in life to plead the cause of the mentally ill for whom medical care was so desperately needed. She pleaded their cause in almost all the State Legislatures of this country prior to the Civil War. She sought the establishment of hospitals for the insane, where mental patients could receive humane treatment. In most instances she was successful.

She came to Alabama first in 1846 and again in 1848 and 1849. During the last visit, she petitioned the Legislature to appropriate funds to establish the first hospital for the insane in Alabama. It was not until 1852 that the State Legislature authorized construction of the hospital, and the first patient was admitted in 1861. Miss Dix persuaded the board of trustees to appoint Dr. Peter Bryce superintendent of the new hospital. Peter Bryce, a well-trained young physician, served for half a century as the hospital's superintendent. He had a profound influence on the treatment of the



DOROTHEA LYNDE DIX
Portrait courtesy Library of Congress

*Tiffany, Frances: Life of Dorothea Lynde Dix. Boston, Houghton, Mifflin, 1891, p. 266.

mentally ill in this State, as well as the rest of the country. Indeed, medicine in general profited from his long service to the mentally ill in Alabama. Miss Dix never lost interest in "her" hospital. She contributed books for its library and maintained a lifelong correspondence with Dr. Bryce.

Daily the cars speed by the lovely shaded entrance to the Bryce Hospital in Tuscaloosa, but few pause to read the roadside historical marker and fewer still know the epic drama of the "lady with a mission" that it commemorates. It is to this small, persuasive, crusading "yankee lady" that the State of Alabama owes so much, for it was through her efforts that the first humane care for the mentally ill in Alabama was instituted.

For these contributions to mental health, Dorothea Dix has been called "the most distinguished woman America has produced."

Howard L. Holley, M. D.
Waters Professor of
Medicine in Rheumatology
University of Alabama
School of Medicine
Birmingham, Alabama

A Reason

Albert Schweitzer said: "I wanted to be a doctor that I might be able to work without having to talk. For years I had been giving myself out of words, and it was with joy that I had followed the calling of theological teacher and of preacher. But this new form of activity I could not represent to myself as talking about the religion of love, but only as an actual putting of it into practice."

—Minnesota Medicine.

Musculoskeletal Miracles

"Orthotherapy," your medical dictionary will tell you, is the treatment of disorders by correction of posture. "Orthotherapy" is also the title of a book by an M. D. just published by M. Evans and Company of New York, a 223-page book illustrated with pen-and-ink sketches, priced at $6.95.

The author is Dr. Arthur A. Michele, in orthopedic practice for more than a third of a century, currently professor and chairman of the Department of Orthopedic Surgery at New York Medical College and also teaching at Flower and Fifth Avenue Hospital and Metropolitan Hospital Center, New York.

Dr. Michele charges that bad posture, headache, backache, clumsiness, sexual difficulties, chronic heartburn and sciatica are all part of a medical syndrome, and that "minor problems of daily pain and misery" may be corrected by corrective exercises.

His book, while primarily for the suffering public, "will also be of interest to medical students, physicians, nurses, and physiotherapists as well as to everyone in the field of physical education."—M.

The desire to take medicine is perhaps the greatest feature which distinguishes man from animals.

—Sir William Osler.

Though a little one, the master-word . . . Work . . . looms large in meaning. It is the open sesame to every portal, the great equalizer in the world, the true philosopher's stone which transmutes all the base metal of humanity into gold.

—Sir William Osler.

That Was BT (Before Tranquilizers)

William Buchanan: "Domestic Medicine" (1799):—Nervous diseases are of all those incident to mankind, the most complicated and difficult to cure. A volume would not be sufficient to point out their various appearances. They imitate almost every disease; and are seldom alike in two different persons or even in the same person at different times. They are continually changing shape; and upon every fresh attack, the patient thinks he feels symptoms which he never experienced before. Nor do they only affect the body; the mind likewise suffers, and is often rendered extremely weak and peevish. The low spirits, timorousness, melancholy, and fickleness of temper, which generally attend nervous disorders, induce many to believe that they are entirely diseases of the mind; but this change of temper is rather a consequence, than the cause of nervous diseases.

—North Carolina Medical Journal.

The Priceless Ingredient

In the City of Bagdad lived Hakeem, the Wise One, and many people went to him for counsel which he gave freely to all, asking nothing in return. There came to him a young man who had spent much but got little, and said, "Tell me, Wise One, what shall I do to receive the most for that which I spend?" Hakeem answered, "A thing that is bought or sold has no value unless it contains that which cannot be bought or sold. Look for the Priceless Ingredient." "But, what is this Priceless Ingredient?" asked the young man. Spoke then the Wise One: "My son, the Priceless Ingredient of every product in the marketplace is the Honor and Integrity of him who makes it. Consider his name before you buy."

—Connecticut Medicine

In the composure of a salad every plant should bear its part like notes in music.

—John Evelyn.

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Limit Opium's Use

In the after treatment of abdominal operations, Opium, as a rule, should not be given unless the patient has acquired the morphine habit. Nothing is allowed on the stomach for 24 or 36 hours, and not then if there is any tendency to vomiting. Liquids only are permitted the first week. For shock, enamata of whiskey and hypodermics of strychnia, digitalin, etc., are given, and heat applied . . . The bowels need not move until the third or fourth day, if no nausea or tympanites occur. If nausea persists after 24 hours, small doses of calomel, frequently r e p e a t e d, enemata of salts and glycerine, or large turpentine enemata, will generally get the bowels to act. Stitches should be removed at the end of a week, after which adhesive plaster should be used. Patient should usually be in bed three weeks and wear an abdominal supporter for a year.

—Virginia Medical Monthly,
December 1892.

Dr. Joseph J. Kline smiled at a little fellow after completing a pediatric examination. "And, Michael, what are you going to do when you get to be as big as your mother?" "Diet," answered the boy.

—Minnesota Medicine.

If the appropriate sanitation services are not provided, the counterpart of increasing opulence will be deepening filth.

—John Galbraith

Everyday medical care has been relatively neglected in the past 20 years while the spotlight has been turned on the spectacular attainments of the specialized disciplines. Insufficient attention has been paid in developing methods for treating the multitude of everyday, commonplace complaints which have considerable economic importance.

—R. F. Bridgman, M. D.
Inspector General,
Ministry of Health, France

Kiss of Death

Kissing can cause tooth decay, according to a report recently presented by Dr. Maury Massler of the University of Illinois Medical Center. Dr. Massler stressed the importance of greater public awareness that tooth decay is an infection and that caries are as easily passed from adult to adult as from parent to child. While sugar is a prime contributor to tooth decay, Dr. Massler told the Greater New York Dental Meeting, efforts to curb "sweet tooth" in children generally fail because punishment is the wrong way to handle the problem. Removing sugar from the diet by substitution is the best approach, he concluded.

—South Dakota
Journal of Medicine.

Careful With The Elbow

Among the joints of the body the elbow joint may be considered as the spoiled child. Its construction is delicate, it is very easily upset and resents harsh treatment . . . Forcible manipulation reduces the mobility of the joint sometimes to a degree where it becomes virtually ankylosed . . . It is almost axiomatic that minor operations on the elbow lead to very poor results. . . . Injuries to nerves in the vicinity are to be expected, the most serious being that of stretching the ulnar nerve by lateral dislocation.

—The Egyptian Orthopaedic Journal.

Man smokes more cigarettes, drinks more, and eats more animal fat, is more obese, subject to more tensions, and exercises less than at any time in human history. He also suffers more frequently from atherosclerosis. The results of one of the most comprehensive studies of this debilitating disease ever undertaken . . . suggest our way of life and most prominent way of dying are interrelated.

—William B. Kannel, M. D.
Nutrition Today.

Organized Medicine's Incubation Predated Alabama

"Unfriendly reports" regarding the rates being charged by doctors in Alabama were being "industriously circulated" a year and a half before Alabama became a State.

Two and a half years after Alabama was admitted to the Union, doctors were being called on to organize themselves into a Medical Society.

More than that, the State of Alabama was still shy of its 8th birthday, when the Medical Society of North Alabama was organized, a constitution adopted, and officers elected at a "Convention of Physicians, held in the town of Huntsville on the 3rd last (December 3, 1827)."

Under the caption, "Historical Note," the following article was compiled under the bylines of:

Howard L. Holley, M. D.
Waters Professor of Medicine
in Rheumatology
University of Alabama
School of Medicine
Birmingham, Alabama
and
Mrs. William Henson
Assistant Head Librarian
Huntsville Heritage Room
Huntsville Public Library
Huntsville, Alabama

There has been now for some time a growing awareness that organized medicine in Alabama began early in North Alabama. The prosperous area of the Tennessee River made commerce and agriculture develop early in this region.

The following historic items may be of interest to members of the profession.

Appearing in the *Alabama Republican* of August 8, 1818 was the following:

NOTICE TO THE PUBLIC

In consequence of certain unfriendly reports having been industriously circulated to the injury of the Faculty of Huntsville they have thought it a duty owed themselves and to the public to make known the rates of charging:

For a visit in town —$1.00
For a visit in the country—from 50¢ to $1.00 per mile, according to circumstances
Prescription—$1.00
Medicines as usual
All visits at night double

Signed: John W. Woodcock, E. B. Clark, Alexander Erskine, N. Perkins, Joseph Wheelwright, Jno. F. Wyche, F. Weedon, Edmund Irby, John Baldwin

---

Appearing also in the *Republican* published at Huntsville, Alabama on Friday, June 15, 1821:

The following note we received from a correspondent in an adjoining county, and submit it without comment to those whom it may concern:

To the Medical Men in Huntsville

Sirs—Would it not be a good thing for you, and the physicians in your vicinity, to form a Medical Society for the purpose of uniting in procuring an extensive library, with chemical and all other apparatus necessary for the mutual instruction of each?

Let the society meet at stated times, and each member deliver a medical lecture. It is my desire to belong to such a society. I have made the motion—who will second it? If any will approbate it please signify it by a line in the Republican.

I am, Gentlemen, yours with esteem,

JUNIOR

There was also published in The Southern

(Continued on Page 159)

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Trocinate relaxes all smooth muscles. Its direct action (musculotropic) does not involve the autonomic nervous system and it is not mydriatic. It is metabolized by the body and eliminated in the urine as harmless degradation products. Trocinate has a remarkable history of freedom from side-effects.

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BLADDER SPASM . . . *relaxation is immediate. One or two tablets condition the bladder for cystoscopy in one hour.*

SPASTIC URETER . . . *the specific relaxing effect of Trocinate on the spastic ureter has been proven by animal studies and affirmed clinically. (J. Urol. 73:487-93)*

PRESCRIBING INFORMATION

WARNING: Do not give in advanced kidney or liver disease. PRECAUTIONS: Trocinate relaxes all smooth muscles. Large dosage or prolonged usage may cause feeling of weakness or can theoretically precipitate gall-bladder colic, due to relaxing the vascular and duct systems. Caution should be observed in patients with urinary bladder obstruction. DOSAGE: 400 mg. May be repeated in 4 hours. After relief, lengthen the dose frequency. (see side note)

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The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



ANTROCOL®

Antrocol provides the prompt, predictable antisecretory action of the belladonna alkaloid, atropine, fortified with sedation and blended with Bensulfoid, contributing to even absorption.



Each tablet or capsule contains: Atropine sulfate, 0.324 mg.; Phenobarbital, 16 mg. (may be habit forming); Bensulfoid, 65 mg. (see white section PDR). The atropine content of Antrocol is the maximum amount the average patient can take at six hour intervals over long periods with comfort.

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Tablet in bottles of 100, 500 and 5000
Capsule in bottles of 100, 500 and 1000

Caution: Federal law prohibits dispensing without prescription.

PRESCRIBING INFORMATION

Contraindicated in glaucoma. Use cautiously in prostatic hypertrophy. Side-effects of toxic dose of atropine: flushing, dryness of mouth, cycloplegia, tachycardia and urinary retention.

DOSAGE: One tablet or capsule after each meal to correct emotional stress and normalize gastric secretions. In treating peptic ulcer, doses at regular intervals up to eight (8) tablets or capsules per day to provide the proper gastric titer for healing. After ulcer has healed, one tablet or capsule after each meal to maintain a titer unfavorable to recurrence.

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Manufacturers of Ethical Pharmaceuticals

(Continued from Page 156)

Advocate, Huntsville, December 7, 1827, the following:

At a Convention of Physicians, held in the town of Huntsville on the 3rd last (December 3, 1827), a Society, to be called the "Medical Society of North Alabama", was regularly organized, a constitution adopted, and the following officers elected:

Thomas Fearn, M. D., President
John R. Lucas, M. D., 1st. Vice Pres't.
Young A. Gray, M. D., 2d. Vice Pres't.
E. Picket, M. D., Corres. Secretary
M. S. Watkins, M. D., Rec. Secretary
Alex Erskine, M. D., Treasurer
Geo. R. Wharton, M. D.,

The object of this institution is to give its best efforts towards the improvement of the Science of Medicine, by concentrating the amount of medical experience and observation, that may be diffused throughout our section of the country, and to increase our common stock of professional knowledge by such means as may appear to us, most conducive to such an end.

The Society is intended to be the depository of such facts and observations, as may be thought worthy of preservation by its members, from which selections will be made from time to time, by an examining committee, of such papers as may be deemed useful, and placed in the care of the corresponding Secretary for publication in some Medical Journal.

An important measure in the estimation of the Society, is to establish upon a permanent basis, a Medical Library, in the town of Huntsville, consisting of such rare and valuable works, as are not usually to be found in the private libraries of physicians. To this Library all the members of the Society will, at all times, have free access; and it is confidently believed, that such a selection of works will be made, as to render it a source of valuable and important information, It has, therefore, been determined by the constitution, that every member of the Society, upon his admission to membership, shall pay to the Treasurer, ten dollars, which, with an annual contribution of an inferior sum, to be fixed by the By Laws, will be appropriated to the purchase of a Library, and to its enlargement, from time to time, as the Society may direct.

The regular meetings of the Society will be held in Huntsville on the first Mondays in May and December, to which is respectfully invited, the attendance of those gentlemen of Alabama, and of the adjoining counties of Tennessee, who wish to become members of this institution.

Published by order of the Society,
M. S. Watkins, Rec. Sec'y

Oft Repeated, Seldom Told

The following letter was sent by three California pediatricians with their most recent monthly statements.

"Dear Parents:

"The current recession and increase of unemployment in our area has created an economic hardship for many. Our task at this office is to keep your child as healthy as possible, and contribute to his optimum growth and development. This requires periodic check-ups, immunization and early illness care.

We would like to assure all of our families that care is available regardless of current economic circumstances and we urge you not to wait in calling our office for advice or treatment in case of an illness or for needed check-ups.

If you are currently unemployed we will arrange for a substantial discount and delayed payments if needed. Please let our bookkeeping department know your circumstances so we may help you adjust to the current adverse economy. Be assured we will do all in our power to continue to protect the health and the growth of your children."

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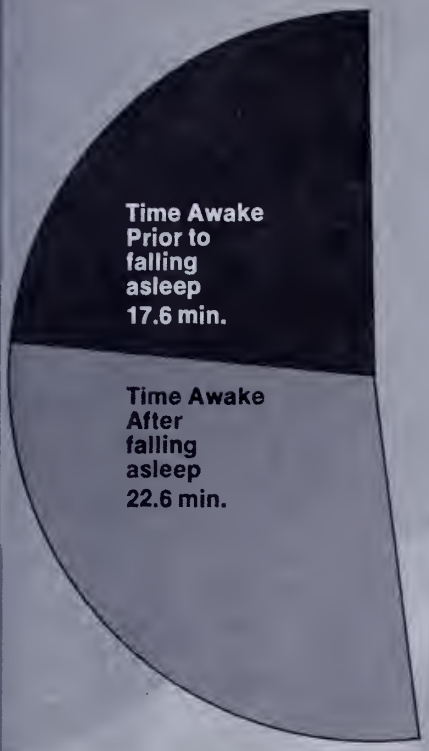
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sleep time	420.0 min.	447.5 min.
sleep percent	88.6	94.5

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oven in the sleep laboratory

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Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • September, 1971 • No. 3

Office of Publication
19 So. Jackson St. .... Montgomery, Ala. 36104
Subscription Price ..... $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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President's Page



Archie E. Thomas, M. D.

The Right To Medical Care

For almost a hundred years the Statue of Liberty has cried with silent lips "Give me your tired, your poor, your huddled masses, yearning to breathe free. The wrecked refuse of your teeming shores, send these, the homeless, the tempest tossed to me. I lift my lamp beside the golden door"—enlightening the world in symbolizing the brotherhood that citizens of a country enjoy under a free form of government.

She proudly stands, the left arm grasping a tablet bearing the date of the Declaration of Independence. This concept of basic human rights to which all human beings aspire found full flower in the "Declaration." This idea brings the term "rights" into sharp focus and puts every facet of American economy to the test, not excluding the medical profession.

Websters dictionary gives ten distinct and separate meanings for the word "right." However, the "right" which one may properly claim as his due, by law or custom, must be differentiated from a basic human right of few in number and include first, the right to life; second, the right for personal ownership; third, the right to earn a living; and fourth, the right to personal liberty. Logically a basic human right cannot be achieved at the expense or unwilling effort of any other individual or individuals; enforcement would deprive others of their basic human rights.

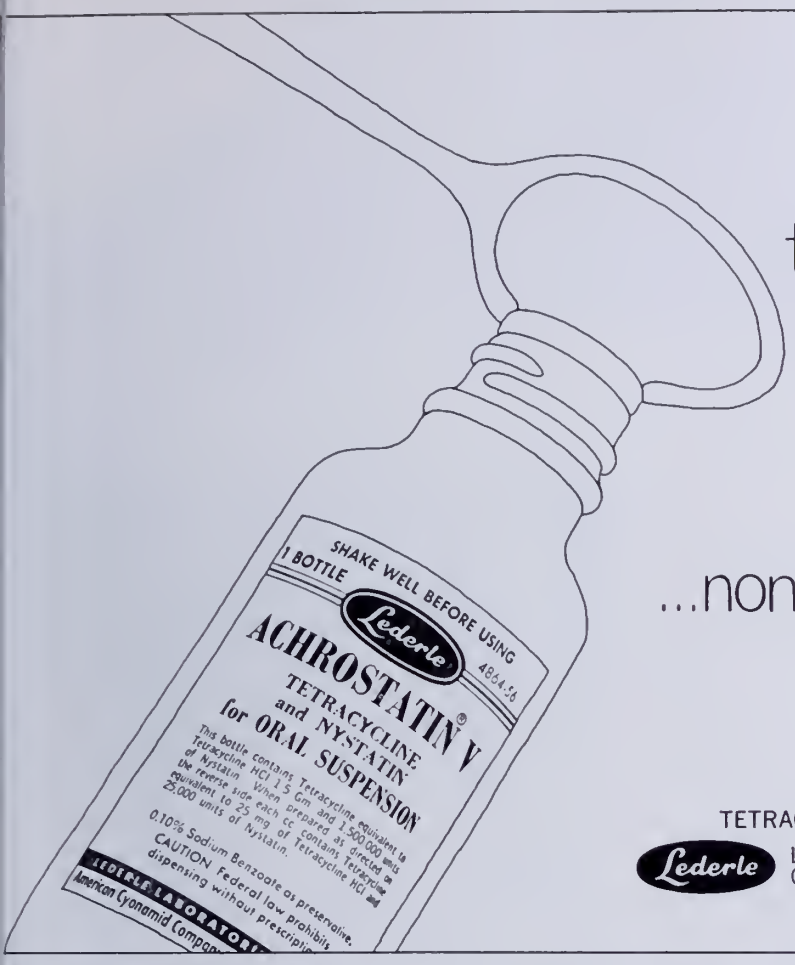
The concept of basic human rights has been held more or less intact down to the present time.

The philosophy of Mark Engels came into being in the middle of the last century. This simply states that individual rights are subservient to the group and subject to the will of the state.

This forms the basic concept of both socialism and communism.

Reduced to the simplest terms the political problems that beset medicine (the Bank Bill) today represent the struggle between individual liberty and independence on one hand and socialism and communism on the other. It is a right of every citizen to have access to adequate medical care but it is his responsibility to seek it and his government's to provide it.

Archie E. Thomas, M. D.
President



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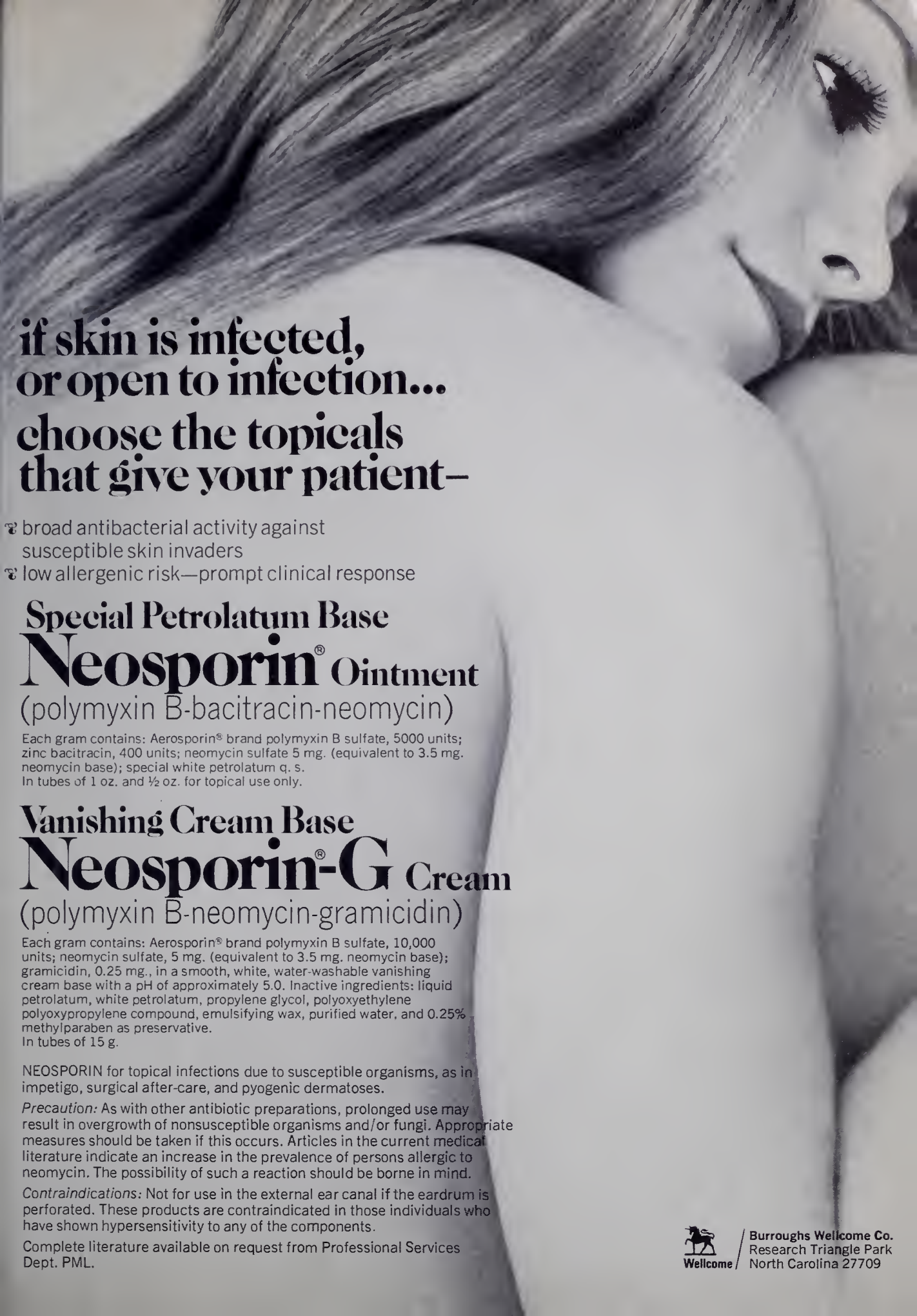
Only 37 of our 67 counties have organized Auxiliaries. No doubt the prime reason these 30 are not organized is you have not indicated that you want, or need, their assistance. Believe me if you let them know you want an organized Auxiliary, they will begin yesterday. Do know that all of your State Auxiliary officers and chairmen are eager to help.

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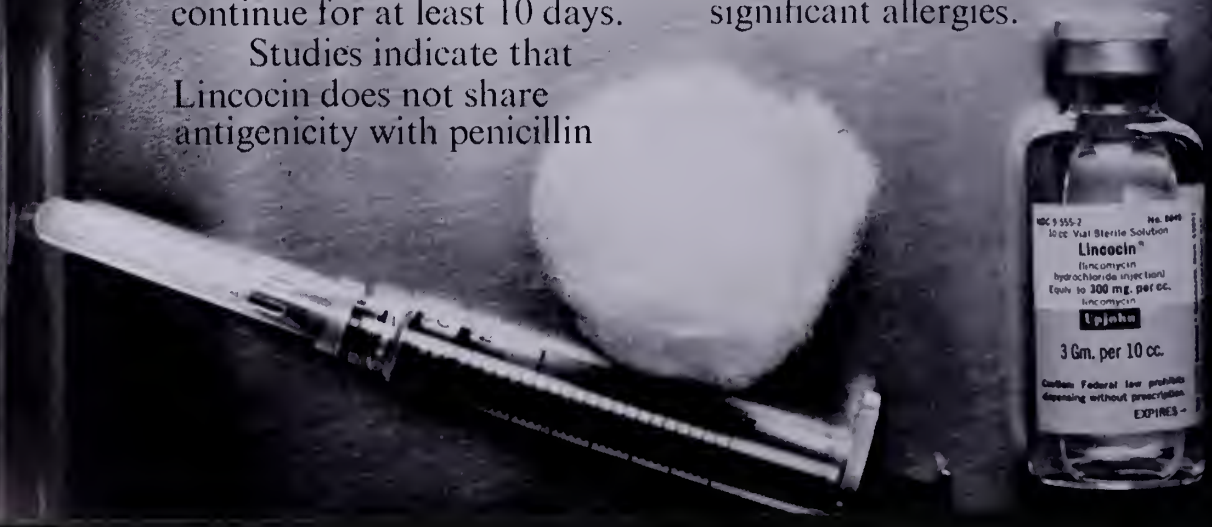
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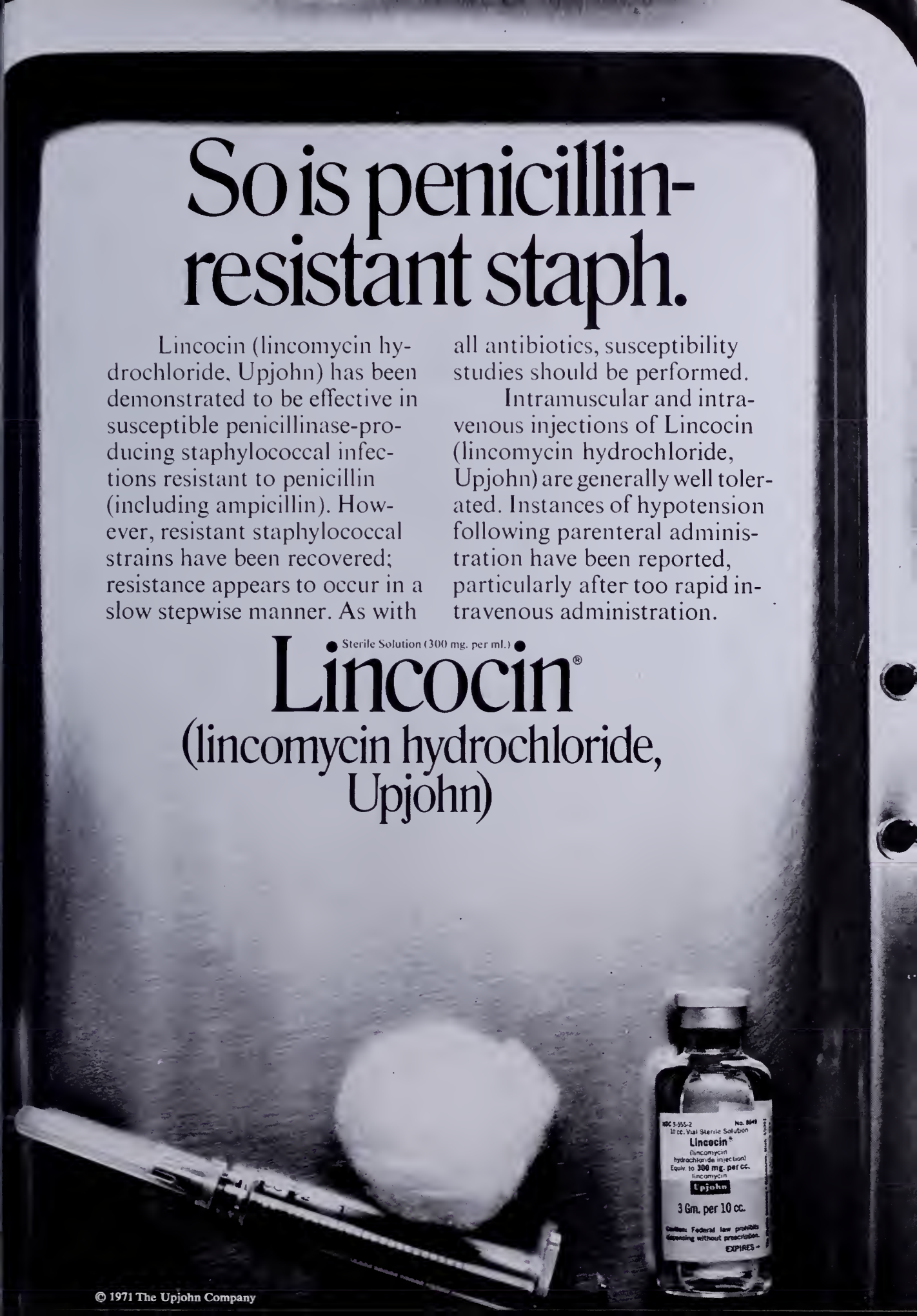
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PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

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Editorial COMMENT

To Lurleen Wallace's Memory, On Eve of Her 45th Birthday

Some Governors of Alabama are remembered for the roads they have built, some for their commitments to education, one for abolition of the lash in prison punishment, one 20th Century Governor for his economies in office, one for his extravagances in the name of welfare, and another for fathering the merit system.

"I would like to be remembered for my contributions to medicine and to health-care delivery," said Alabama's only woman Governor, earnestly.

And so she is.

It was no medieval Bedlam that Governor Lurleen (Burns) Wallace saw, within a month of her 1967 inauguration, when she fulfilled a campaign promise and visited Bryce Hospital in the town of her nativity. But the shock of it was so great, reported a Montgomery pediatrician who accompanied her, that she was visibly shaken and tears coursed down her cheeks.

Thereafter, as the records will show and as many an Alabama doctor will remember, she became dedicated to health services for all Alabamians in general, the mentally ill in particular. She made speeches at every opportunity—notably before the annual ALAPAC luncheon in 1968. And she personally pushed programs before the Legislature—notably a $15 million bond issue for establishment of four regional developmental centers in Birmingham, Decatur, Mobile and Wetumpka. All of it was aimed at a healthier Alabama.

When she began what was then a lonely crusade, Alabama ranked 50th among the States in its care for the mentally ill. Today, thanks in a major measure to her efforts and her encouragement of dedicated Alabama doctors, one State after another has fallen behind Alabama. "Given another four years of uninterrupted progress, and we'll be among the top ten," predicts the same Montgomery doctor who accompanied her on her first visit to the Tuscaloosa institution.

Lurleen (Burns) Wallace was born near Tuscaloosa on Sunday, Sept. 19, 1926.

Would it not be highly appropriate if the doctors of Alabama paused at some time in their busy Sunday of Sept. 19, 1971, to pay a moment of silent tribute to and respect for the memory of the finest friend of medicine and medical health care who ever sat in the gubernatorial chair of Alabama?

(Continued on Page 180)

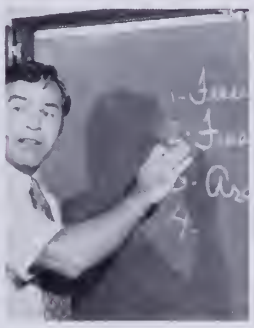
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(Continued from Page 178)

Our Relative Value Index For 1971

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Oscar Wilde once defined a cynic as "a man who knows the price of everything, and the value of nothing." But in a capitalistic country, whose functions are predicated on competitive restraint of the profit motive, a balance of price and value is ideal if not essential. The person who sneers at relative values is either a fool or a foe of the system.

"1971 Alabama Relative Value Index Study" is the 135-page document on which this editorial observation is based. Specifically it covers the fields of Medicine in general, Anesthesia, Surgery, Radiology and Pathology. And each division opens with a chapter on "Ground Rules." Diagonally across every page is printed in pink ink the warning: *"For Study Purposes Only—Not To Be Used As A Fee Schedule."*

Values are always relative; meaning simply that what is valuable today may not be so valuable tomorrow, or vice versa. That is why the date, 1971, is so important on this volume compiled by the Committee on Relative Value Index, Medical Association of the State of Alabama. That is why a "Relative Value Index Study" for our country would have to be dated. But it would establish indelibly the fact that overemphasis of any facet of government would be wrong.

Which brings us right down to the basics: —An imbalance between prices and values —between rights and responsibilities—is as disastrous in government as it is in the professions and trades.

GUEST EDITORIAL

For The First Time, Spotlight Turns On Pathology

In recent years the pathologist has abandoned his warm but dusty cocoon in the basement of the hospital and emerged into the daylight as a full-fledged physician with bright and colorful wings—or, in the opinion of some, a set of horns and pitchfork reminiscent of his pre-war days near the furnace room.

What is pathology? According to Boyd it is the study of the basis of disordered function. Robbins maintains that it is in the broadest sense the study of medicine—not a discipline confined to the laboratory. Anderson considers pathology to be the study of the nature of disease with many facets. These over simplified definitions can be elaborated on extensively. My own definition is that a pathologist is a physician by training who helps other physicians to diagnose and treat disease.

We are urged as others are to be the complete physician with an interest in the patient at the bedside to the final report from the clinical laboratory. At the same time the field of pathology is expanding probably faster than any other specialty so that many find themselves pushed behind the "paraffin curtain" in anatomic pathology or in many of the recognized or unrecognized subspecialties in anatomical and clinical laboratory medicine. Only a super brain with an understanding wife could be well versed and cur-

rent in all the various branches. These include chemistry, microbiology, serology, immunohematology, hematology, cytology, to name a few.

All of these are in a rapid state of change and a dominant factor of change is automation. The machines of automation range from a simple dilutior or shaker to huge multi-thousand dollar machines that can run 12-18 or more multiple tests on a single sample. Machines now can do blood typing, differentials, chemistries, and even cytology. They have enabled the pathologist to provide other physicians with the increased services of laboratories at a lower cost to patients. When the laboratory buys a new machine that gives a large number of tests at a much lower cost the pathologist begins to sprout wings and even a glitter of halo begins to show.

However, the efficiency of the machines has become a mixed blessing. Technical people can and do become more proficient in many individual phases of laboratory practice than the pathologist and have entered the field. Many businesses have now entered the field in a fierce competition for necessary huge volumes and with blessings of the federal government. Is a urinalysis or chemistry profile of a patient in a laboratory different from an aide taking a blood pressure or doing a white count in an office? The government says there is and by decree clinical pathology is now a business and pathologists are businessmen.

Reaction is varied. Some pathologists have resisted change, some have gone all out for the business of laboratory medicine. Most, however, have accepted changes and pushed forward with the best of the newer ideas. Some have despaired of the future of clinical laboratory medicine and are willing to give up.

There is an alternative. As long as there are clinicians with the care of the sick as their prime reason for being, there will be a demand for pathologists who also have the patient as their primary interest.

Changes are rapid with no end in sight. Many questions are raised but the answers are few and sometimes contradictory. A guide to help us through the future maze of problems is one that has helped all physicians in the past in all fields of medicine. It is simply to do what is best for the patient.

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THE JOURNAL
of
THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA
Published Under the Auspices of the Board of Censors

Volume 41 September, 1971 Number 3

A Review Of Clinical Renal Transplantation At The University Of Alabama Medical Center*

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Renal transplantation, in properly selected recipients, provides a means of restoring normal or near normal renal function to patients with terminal renal failure. In addition the overall health of the patient after transplantation is remarkably improved enabling them to return to an active and useful life. The success or failure of the post-transplant course depends upon a number of factors including the etiology of the original disease, the physical condition and age of the patient at the time of transplantation, the technical aspects of the operation and the postoperative complications. The ability of the immunosuppressive drugs to overcome the histocompatibility differences between the donor kidney and the recipient patient is fundamental to the final result. If all of these obstacles are successfully overcome with a functioning transplant and satisfactory renal function, the patient may enjoy a prolonged period of good health. The length of time necessary to achieve full rehabilitation after renal transplantation varies according to the above mentioned facts.

The following paper summarizes the experience of 27 patients consecutively undergoing renal transplantation at the University of Alabama Medical Center.

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Patients Evaluated and Accepted For Renal Transplantation

During the past two and one half years more than 100 patients have been evaluated as potential recipients for renal transplantation at the University of Alabama Medical Center including the University Hospital, the Birmingham VA Hospital and the Childrens Hospital. In several instances patients

with chronic renal failure were evaluated by bedside consultation in other hospitals throughout the state. The criteria used for acceptance of patients with renal transplantation were in general those previously outlined[1]. Approximately 45 patients evaluated for renal transplantation have been accepted for this mode of treatment. Twenty-seven of these patients have received kidney transplants, and the remaining are awaiting a suitable cadaveric kidney while being maintained on hemodialysis at the University Hospital.

The ages of the patients undergoing renal transplantation ranged from 11 to 50 years (see Table I.) Patients from the age of seven to 55 have been evaluated in consideration for transplantation; however, the youngest patient accepted, (TX ♯23), was 11 years old. The oldest patient, (TX ♯9), was 50 years of age. Although we have not set rigid age limits for transplantation, most of the patients accepted as recipients of renal allografts are between the ages of 20 and 45. Six patients were 20 to 29 years old. Eight of the recipients were between 30 and 39 years of age, and nine patients were over the age of 40. Six of the 27 patients transplanted were maintained on long term dialysis for more than two years prior to transplantation.

TABLE I

AGE OF RECIPIENTS

Ages at time of Transplant	Patients
10-19 Years	4
20-29 Years	6
30-39 Years	8
40-49 Years	8
50+ Years	1

Tissue Typing

Histocompatibility testing, i.e. "tissue typing," was completed in 26 of the 27 donor recipient pairs. The technique used was a modification of Terasaki's lymphocytoxicity test based on the principle that when the antibody in a monospecific antiserum combines with a tissue antigen on the lymphocyte, the lymphocyte is detectably damaged, indicating the presence of a specific HLA antigen. An antisera panel detecting between eight and 11 different antigens was employed, and the antigenic components of each donor-recipient pair were compared. A "major mismatch" refers to the circumstance in which the donor possesses a HLA antigen that is absent in the recipient. Thus, the recipient would respond immunologically by producing antibody to the "foreign" antigen. A "positive crossmatch" indicates that the recipient has developed humoral antibody or antibodies to the prospective donor's tissues prior to transplantation. This is, of course, an absolute contraindication to transplantation.

Although there is statistical evidence to support the concept that a good histocompatibility match results in improved survival of the kidney with better postoperative renal function[7], this particular series is too small for a statistical comparison of the clinical results and tissue typing. We have endeavored in every instance to select the most compatible donor recipient combination but have not excluded living related donors because of histocompatibility differences. In fact we have had successful transplants between parent and offspring in spite of a three antigen mismatch (TX ♯6, ♯7, & ♯17).

Immunosuppressive Therapy

All 27 patients received azathioprine and prednisone as immunosuppressive therapy. Recipients of allografts from related donors were pretreated with azathioprine two days prior to surgery (4 mg/kg/day) except in a few instances when the drug was initiated 24 hours prior to transplant. Azathioprine was gradually reduced during the first four post-transplant weeks to approximately 100 to 150 mg/day (1.5 to 2.0 mg/kg/day). One

patient has tolerated 200 mg/day without significant depression of the peripheral white blood cell count. Prednisone was reduced to 30 mg/day (.5 mg/kg/day) three weeks post-transplantation and maintained at that level for the first three months. A similar drug protocol was used in the cadaveric recipient except that prednisone was maintained at 40 mg/day for the first three months. Gradual reduction in steroid dosage was then achieved during the next nine months, and one year later most patients with kidneys from living related donors required 15 to 20 mg/day. Recipients of cadaveric kidneys required slightly higher levels of prednisone (20 to 25 mg/day). Progressive reduction of prednisone was continued in some patients until a daily dosage of ten to 12.5 mg/day has been reached.

Twenty of the allograft recipients received intramuscular antithymocyte globulin, 2 mg/kg/day, in addition to azathioprine and prednisone. This material was administered daily six or seven days pretransplantation and 14 days thereafter for a total of 20 to 21 injections. Local pain and induration were common occurrences at the site of injection, but to date no anaphylactic reactions have occurred using the intramuscular route of administration. Systemic fever was particularly significant during the first few days of antithymocyte globulin treatment. The IgG fraction of antilymphocyte globulin was administered by the intravenous route to two patients. One of these patients developed hypotension necessitating discontinuation of this form of therapy. The patients receiving antithymocyte globulin in addition to azathioprine and prednisone have had a particularly favorable post-transplant course. There have been seven clinical rejection episodes all easily reversed by increasing the daily dosage of prednisone together with the administration of local X-ray therapy to the midplane of the allograft (150 r x 3). Two separate rejection crises were precipitated in one patient, (TX ♯5), who ceased to take prednisone because of facial acne. In this instance renal function was stable for seven months following transplantation until the sudden withdrawal of prednisone. Only one patient, (TX ♯13), died as a result of irreversible rejection. This patient received antithymocyte globulin only after rejection had started six weeks post-transplantation. Although the number of patients is too small to be of statistical significance, it appears that addition of antithymocyte globulin has decreased the incidence and possibly diminished the severity of the rejection reaction.

Pathology of Original Disease

The most common disease precipitating terminal renal failure prior to renal transplantation was chronic glomerulonephritis (see Table II). This diagnosis was proven by histology in 15 patients. Six patients developed renal failure secondary to chronic pyelonephritis. Three of these individuals had bilateral ureteral reflux with chronic urinary tract infection of more than ten years duration. Arteriolonephrosclerosis was present in three negroes between the ages of 35 and 45. These patients first became symptomatic because of severe hypertension and rapid progression of renal failure. One recipient sustained trauma to a solitary ectopic kidney requiring nephrectomy, and another patient with polycystic kidney disease developed progressive renal failure. There was one instance of renal dysplasia in an 11 year old child with a remnant of a renal pelvis on the right side and a small left dysplastic kidney.

TABLE II

PATHOLOGY

Disease	Patients
Chronic Glomerulonephritis	15
Chronic Pyelonephritis	6
Arteriolonephrosclerosis	3
Polycystic Kidney	1
Renal Dysplasia	1
Renal Trauma	1

TABLE III *

NUMBER TRANSPLANT	AGE	SEX	RECIPIENT'S DISEASE	RECIPIENT BLOOD TYPE	DATE OF TRANSPLANT	DONOR			IMMUNO-SUPPRESSIVE TREATMENT	REJECTION CRISIS		RESULTS	MONTHS SURVIVAL OF TRANSPLANT	RENAL FUNCTION				MEDICATION			
						RELATION	AGE	BLOOD TYPE		NO.	DRUG TREATMENT			BUN	CR	CrCl	PROTEINURIA	PREDNISONE	AZATHIOPRINE	ANTI-HYPERTENSIVE	DIURETIC
1	26	M	GN	A+	5/8/68	Sib	24	A+	1,2	1	2,4	Alive	29	16	1.2	107	0	12.5	100	NO	YES
2	16	M	Trauma	A+	5/29/68	Sib	20	A+	1,2	1	2,4	Alive	28	51	4.3	27	2+	25	100	NO	NO
3	36	M	GN	B+	5/31/68	Cd	37	B+	1,2	1		Dead**	0	--	--	---	-	----	----	-	-
4	29	M	GN	O+	6/19/68	Sib	32	O+	1,2	1	2,4	Alive	28	60	2.1	35	4+	17.5	200	YES	YES
5	23	M	GN	O+	12/ 6/68	M	48	O+	1,2,3	2	2,4,5	Alive	22	88	5.3	19	2+	27.5	75	NO	NO
6	34	M	GN	O+	1/8/69	M	51	O+	1,2,3	0		Alive	20	29	1.5	58	1+	20	100	YES	YES
7	42	M	GN	O+	3/10/69	M	61	O+	1,2,3	0		Alive	19	22	1.8	35	1+	15.	100	NO	NO
8	33	M	GN	O	4/11/69	Sib	32	O+	1,2,3	0		Alive	18	15	1.2	101	0	15	150	YES	YES
9	50	F	Pyelo	A+	4/14/69	Sib	39	A+	1,2,3	0		Alive	18	17	1.0	110	0	15	150	NO	NO
10	14	F	Pyelo	A-	6/11/69	F	49	A+	1,2,3	0		Alive	16	22	1.4	45	0	7.5	75	NO	NO
11	47	F	Pyelo	O+	6/20/69	Sib	52	O+	1,2,3	-		Alive	0	--	---	--	-	--	---	-	-
12	43	M	GN	O+	7/3/69	Sib	40	O+	1,2,	1	2,4	Alive	15	27	1.1	59	1+	20	100	NO	YES
13	41	M	ASN	O+	9/17/69	C	47	O+	1,2,	2	2,4,5	Alive	13	27	1.3	84	0	25	150	YES	YES
14	43	F	ASN	A+	9/17/70	Cd	47	O+	1,2,	3	1,2,4,5	Dead	2	141	7.5	--	4+	400	100	YES	YES
15	31	M	GN	O+	10/1/69	F	55	O+	1,2,3	0		Alive	12	22	1.2	77	0	15	100	NO	NO
16	30	M	Pyelo	O+	10/8/69	Sib	33	O+	1,2,3	1	2	Alive	12	25	1.2	107	0	17.5	150	NO	YES
17	22	M	GN	A+	10/15/69	M	57	A+	1,2,3	1	2	Alive	12	29	1.4	68	0	20	100	YES	NO
18	41	M	Pyelo	B+	10/22/69	Sib	36	O-	1,2,3	1	2	Dead	6	23	0.9	-	0	32.5	150	NO	NO
19	42	M	GN	B+	10/29/69	Sib	51	B+	1,2,3	0		Dead	3	60	2.7	14	1+	30	75	YES	YES
20	39	M	ASN	A+	3/29/70	Cd	61	A+	1,2,3	1	2,4,5,6	Alive	7	23	1.8	49	4+	37.5	75	YES	YES
21	23	F	Pyelo	A+	4/15/70	Sib	31	A+	1,2,3	0		Alive	7	21	1.1	61	0	25	100	YES	NO
22	32	M	GN	A+	4/20/70	Sib	22	O+	1,2,3	0		Alive	6	25	1.0	80	0	25	100	NO	NO
23	11	M	Cong.	B+	5/25/70	F	48	O+	1,2,3	1	2,4,5	Alive	5	19	0.8	55	0	20	50	YES	NO
24	24	M	GN	A+	5/27/70	Sib	40	O+	1,2,3	1	2,4,5	Alive	5	27	1.3	81		30	150	YES	YES
25	19	F	GN	O+	6/24/70	F	48	O+	1,2,3	0		Alive	4	29	1.2	61	0	27.5	75	YES	YES
26	45	M	GN	O+	7/24/70	Cd	18	O+	1,2,3	1	2,4	Alive	3	27	1.2	82	0	40	100	NO	YES
27	38	M	Poly	A+	7/24/70	Cd	18	O+	1,2,3	0		Alive	3	25	1.1	101	0	40	100	NO	YES

GN- Glomerulonephritis
Pyelo-Pyelonephritis
ASN-Arteriolonephrosclerosis
Poly-Polycystic Kidneys
Cong.-Renal Dysplasia

1-Azathioprine
2-Prednisone
3-Antilymphocyte Globulin
4-Actinomycin C
5-X-ray
6-Heparin

**Died 10 months later on Dialysis

* All data obtained from October 1- October 15, 1970.

Results of Clinical Renal Transplantation

Survivors

Twenty-three of the 27 patients receiving renal transplants are alive and 22 have functioning kidneys (see Table III). One patient, (TX #11), developed an intrarenal thrombosis distal to the site of the renal artery hypogastric artery anastomosis with subsequent renal infarction. The kidney was removed seven days later, and she has been since maintained on chronic dialysis. The duration of functioning renal transplants in the other 22 patients extends from three to 29 months.

Renal function has been stable in 19 of the transplant recipients, 11 of whom received their allografts more than one year ago. Chronic rejection with slowly deteriorating renal function, present in two patients, (TX #5, TX #2), was proven in both instances by renal biopsy. Microscopic examination of the biopsy specimens revealed a loss of renal tubules replaced by fibrous connective tissue with accumulation of lymphocytes and plasma cells in the interstitium. Glomeruli showed minimal thickening of the basement membrane. The arterioles appeared to be unchanged. (See Figure 1) Both of these individuals had normal renal function before they elected to stop taking the immunosuppressive therapy thereby precipitating acute rejection. One other patient, (TX #4), developed proteinuria within six weeks of the transplant operation; however, he maintained a blood urea nitrogen of 27 mg/100 ml and a serum creatinine of 1.4 mg/100 ml for the next 18 months. A renal biopsy at this time revealed glomerular changes similar to those seen previously in the patient's own kidneys and may represent an instance of recurrent glomerulonephritis in the transplanted kidney. Renal function is now deteriorating, 28 months post-transplantation, and a second renal transplant is anticipated. Two patients, (TX #6, and TX #7), received renal allografts from their

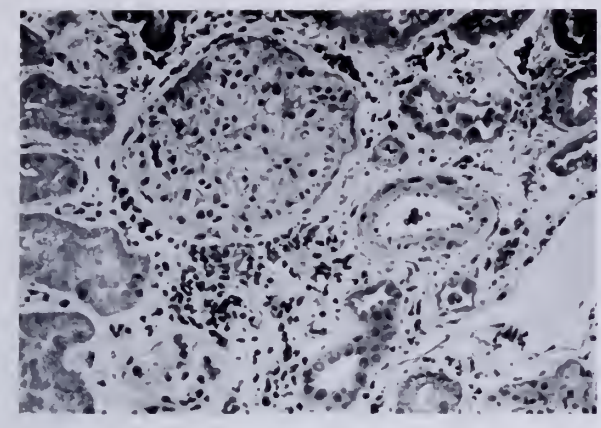


Figure 1

Biopsy of a renal allograft 18 months after transplantation. Two rejection episodes had occurred secondary to voluntary reduction of prednisone. There is replacement of renal tubules with fibrous tissue and accumulation of lymphocytes and plasma cells within the interstitium. The glomerulus shows minimal thickening of the basement membrane.

parents, and although renal function is stable, it has never been entirely normal.

Deaths

Four of the 27 patients have died. One patient, (TX ♯3), died on dialysis 11 months post-transplantation following removal of the allograft for hyperacute rejection. Two patients died from causes unrelated to rejection. One of these patients, (TX ♯19), received a renal transplant from his brother with immediate function and a normal serum creatinine during the first three post-transplant weeks. He then sustained a myocardial infarction with a decreased cardiac output and impaired renal function. A renal biopsy, eight weeks later, showed an active glomerulopathy characterized by hypercellularity and intramural fibrin deposition in the capillaries. This may well have resulted in a further reduction of glomerular blood flow and effective filtration. Eleven weeks after transplantation generalized peritonitis occurred secondary to perforation of an abscess in the left nephrectomy site. This was followed by another myocardial infarction and death. The other patient to die from causes unrelated to rejection, (TX ♯18), developed a marginal ulcer with massive gastrointestinal bleeding six months after transplantation. Emergency resection of a previous gastrojejunostomy was necessary, and the patient died three days later of a pulmonary embolus. The fourth patient. (TX ♯14), a recipient of a cadaveric transplant, sustained a relentless rejection episode six weeks post-transplantation which could not be reversed utilizing azathioprine, local X-ray therapy to the graft, antithymocyte globulin and an increased dosage of prednisone. This patient expired with septicemia secondary to bone marrow suppression. The renal transplant contained minimal mononuclear cell infiltration but had undergone severe vascular damage with intimal proliferation of renal arterioles.

Complications

Complications secondary to the operative procedure or the immunosuppressive therapy interfered to some degree with the post-transplant course in 20 of 27 patients and in three instances contributed to their death. Infection was the most common serious complication. In this series eight patients developed serious post-transplantation infection, and two died. Three of the serious infections occurred at the transplant site. The frequent occurrence of postoperative staphylococcal wound infection in those who were found to be carriers of this organism prior to transplantation is of interest. Two patients contracted pneumonia, one due to *Staphylococcus aureus*, and the other to pneumococcus. Lesions identical to a disseminated *Herpes simplex* infection occurred in one patient and renal parenchymal infection by *Candida albicans* in another. A systemic infection with *Nocardia* was present in one individual, (TX ♯27), and although the patient is improved, the outcome is still in doubt.

Urinary tract infection has been extremely common with bacteriuria complicating the post-transplant course in over 80 per cent of the patients. Three of these patients had a positive bladder culture prior to transplan-

tation, and in these patients bacteriuria cannot be considered to be a direct consequence of the procedure or the immunosuppressive therapy.

Gastrointestinal bleeding secondary to peptic ulceration has been reported following renal transplantation[2]. This complication occurred in two patients, and in both instances gastric resection was necessary. Diabetes mellitus, induced in four patients by the initial dosages of prednisone, improved as the prednisone dosage was reduced. Insulin is no longer necessary in any of these patients.

Hypertension, frequently present prior to transplantation, may subside after a successful transplant[5]. Those patients with chronic glomerulonephritis or arteriolonephrosclerosis and accelerated hypertension in the terminal phase of their illness often continue to be hypertensive immediately after transplantation. However, there may be a gradual return in blood pressure toward normotensive levels after several months. In one instance, (TX ♯1), severe hypertension occurred in the immediate post-transplant course requiring the use of continuous intravenous sodium nitroprusside for six days until the usual antihypertensive medication provided adequate control of the blood pressure. This patient became normotensive during the next seven months and now requires only 50 mg of hydrochlorothiazide a day.

Two patients developed collections of perirenal lymph following transplantation. This complication is unusual but has been recognized with increasing frequency[3]. The first patient, (TX ♯9), was explored with drainage of the lymphocoele. A recurrence of the fluid has occurred, although to a lesser degree, and the patient is now asymptomatic. The second patient, (TX ♯12), developed acute ureteral obstruction secondary to the pressure of the lymphatic fluid in the perirenal space. Drainage of the lymphocoele was followed by a postobstructive diuresis and eventual recovery of near normal renal function.

Urologic complications are among the most serious encountered after renal transplantation[6]. Infection commonly accompanies uretero or vesicocutaneous fistulae and may contribute to the death of the patient. In this series there was one instance of ureteral necrosis requiring ureteropycloplasty with nephrostomy tube drainage and eventual recovery, (TX ♯17). Dehiscence of the bladder closure occurred in one instance with eventual healing after cystotomy drainage.

Asceptic necrosis of the femoral head, a complication of steroid therapy, requires prolonged partial weight bearing of the involved extremity or replacement by an Austin Moore prosthesis[5]. Three patients have had degenerative changes in the articulating surface of the femoral head, one of whom required a bilateral Austin Moore replacement. The other two patients improved on conservative treatment although both continue to be symptomatic.

Rehabilitation

Twenty-three of the 27 patients receiving renal transplants are alive. One patient, (R. C. TX ♯11), who sustained an infarction to the kidney and returned to chronic dialysis, continues to be an active housewife. Six patients are well with functioning kidneys but not yet ready to return to work. Three housewives are able to take care of their household duties. One patient works part-time as a hairdresser although full-time work is medically possible. The other occupations include farmer, common laborer, car salesman, clerk, welder, crane and heavy equipment operator, student and mechanic. (See Figure 2) In spite of the serious postoperative complications encountered by some patients, all but two have recovered sufficiently to return to their former occupations and are gainfully employed.

The duration of hospitalization required after transplantation varies from patient to

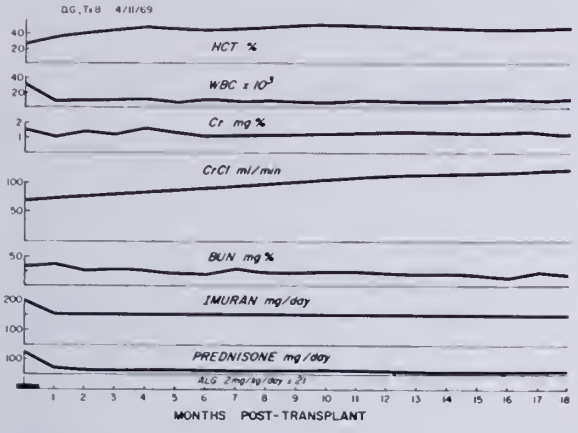


Figure 2

The course of Transplant #8 is demonstrated for 18 months post-transplantation. The BUN and creatinine are stable and less than 25 mg/100 ml and 1.2 mg/100 ml respectively. The CrCl is stable at 85 ml/min. Prednisone has been reduced to 15 mg/day with Imuran 150 mg/day. The patient continues to be actively employed as a crane operator since six months after transplantation.

patient depending upon their general physical condition as well as their post-transplant course. Six patients were discharged between three and four weeks after surgery; however, two of these required brief readmissions. Most patients were discharged between six and eight weeks after the transplant procedure. In several instances serious infections required hospitalization for as long as four months. Prolonged hospitalization of this duration was frequently discouraging for the patient and his family, and continual psychologic support was required from both physicians and nurses. Psychiatric evaluations, performed on transplant patients as well as those individuals maintained by hemodialysis, indicated that the illness created considerable emotional stress between the patient and his family as well as between the family members themselves. Although many of these problems can be helped by a thoughtful and sympathetic professional staff, psychiatric consultation may be necessary. The problem of rejection should not be considered an all or none phenomenon in the immediate post-transplant course, and patients should be aware that certain period of time must elapse until the allograft has become adapted to the recipient by means of the immunosuppressive therapy.

Medical follow-up of the transplant recipient is either by the family physician or the Transplant Clinic at the University of Alabama Medical Center. Weekly blood studies including complete blood count, blood urea nitrogen and serum creatinine are required for the first 18 months until renal function is stable on reduced amounts of immunosuppressive drugs. Subsequent visits may be then extended to two or three weeks.

Summary

Renal transplanation in selected patients can be an effective means of restoring normal renal function and returning the individual to an active and useful life. Twenty-three of the 27 patients receiving renal allografts are alive, and 22 have functioning kidneys. Complications are frequent in the post-transplant period but once corrected do not interfere with the ability of the patient to return to an active and useful life.

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Iatrogenic Disease In The Treatment Of Rheumatoid Arthritis*

William H. Dodson, M. D., and Howard L. Holley, M. D.**

The cause and cure of rheumatoid arthritis continue to be one of science's unsolved mysteries. Until specific treatment is available empirical means will continue to be used. A wide variety of drugs are used to treat this disease, most of which act symptomatically with little evidence that they affect the underlying disease process. The unremitting pain and progressive disability frequently create an attitude of desperation on the part of the unfortunate victim and encourage the continuation of drugs for the relief of his symptoms long after they should have been discontinued. The large number of therapeutic agents given in sizeable doses over a prolonged period of time render such patients more susceptible to toxic reactions. It seems timely to re-emphasize the occurrence of these reactions to facilitate their recognition by the busy practitioner.

Salicylates. Aspirin remains the single most useful agent in the treatment of rheumatoid arthritis and is usually the least toxic. Undesirable side effects are relatively common but may be easily corrected or avoided. When salicylates are administered in large doses, gastric intolerance (nausea and heartburn) is usually the first toxic effect. This complication may be avoided by taking the drug with food, milk or antacids or by using aspirin buffered witht an antacid.

Salicylate Toxicity

- *Gastric intolerance (nausea, heartburn, epigastric pain, ulcer reactivation)
- *Gastro-intestinal hemorrhage
- *Tinnitus
- *Deafness (reversible)
- Metabolic toxicity (metabolic acidosis and ketosis in young children and respiratory alkalosis in adults)
- Idiosyncrasy (asthma, angioneurotic edema, anaphylaxis)

Enteric coated preparations are well tolerated but absorption is unpredictable. Careful studies have revealed that a majority of patients receiving salicylates will lose small amounts (2 ml to 6 ml daily) of blood from the gastro-intestinal tract[1]. Iron deficiency anemia may result; therefore, patients should have periodic hematocrit determinations and should be given oral iron replacement if significant anemia results. Tinnitus and deafness may result from aggressive salicylate therapy but both are usually reversible on reduction of the dose and hence of no lasting concern. The latter symptoms may serve as useful end points for the determination of salicylate dosage in adults, but young children may develop metabolic toxicity (metabolic acidosis and ketosis) prior to the occurrence of tinnitus. Metabolic toxicity may be avoided in children by the regular measurement of blood salicylate levels and maintaining a level of less than 30 to 40 mg per cent. Metabolic toxicity is less common in adults and is usually manifested as respiratory alkalosis[2]. Idiosyncratic reactions, such as bronchospasm, angioneurotic edema and anaphylactic shock occur uncommonly but one should be alert for their occurrence, especially in asthmatics[2]. Mental irritability and even overt psychoses may result from large doses of aspirin but both

*This investigation was supported by a Public Health Service Grant, T1 AM 5000 from the National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, Maryland and The Arthritis Foundation, New York, New York.

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toxicities are remedied by discontinuation of the drug.

Indomethacin Toxicity

***Gastro-intestinal distress (nausea, heartburn, occult bleeding, and peptic ulceration)**
***Cerebral symptoms (dizziness, giddiness, confusion and headache)**
Edema due to salt and water retention
Overwhelming infection in children?
Rash and urticaria

Indomethacin. Unfortunately, indomethacin has proven of limited value in the treatment of rheumatoid arthritis but it may at times be a useful adjunct to the salicylate regimen[3]. The drug has two major areas of potential toxicity: the gastro-intestinal tract and the central nervous system. Gastro-intestinal disturbances range from nausea and dyspepsia to peptic ulceration and occult bleeding. The risk of such toxicities may be minimized by taking the drug with meals or antacids. Headache and other central nervous system symptoms represent the most common side effects[3]. The headache is usually frontal and more intense in the morning on awakening and may be severe enough to force a reduction or discontinuation of the drug. Other cerebral symptoms are dizziness, giddiness and mental confusion. Depression, drowsiness, hallucinations and seizures have been reported, but it is difficult to determine whether they have been related to the drug. Edema, due to salt and water retention, has been observed rarely; rash and urticaria also occur infrequently[3]. Reports of hepatitis, pancreatitis and leukopenia have been so infrequent that perhaps these represent coincidence[4 5]. Two children with juvenile rheumatoid arthritis who were receiving indomethacin have been reported to have died suddenly of overwhelming infection and at present it is recommended that indomethacin not be administered to children[6].

The Antimalarials. Chloroquine and hydroxychloroquine became unpopular as therapeutic agents for rheumatoid arthritis several years ago when it became apparent

Hydroxychloroquine Toxicity

***Gastro-intestinal complaints (anorexia, nausea, abdominal cramps, diarrhea)**
***Corneal Deposits**
Bull's eye retinopathy
Bleaching of hair and alopecia
Neuromyopathy
Pleomorphic skin eruptions
Seizures

that ocular toxicity resulted from their use. Antimalarials have been shown to have an anti-inflammatory effect in patients with rheumatoid arthritis and the drugs now appear to be regaining a place in the treatment of rheumatoid arthritis[7 8]. The use of chloroquine and hydroxychloroquine over a period of six to 12 months has been shown to result in corneal deposition of the drug in 28 per cent of patients but this effect is not of lasting concern as the infiltrations routinely disappear seven to eight months (average) after discontinuation of the drug[9]. The most feared toxic effect is retinopathy resulting in irreversible macular damage and diminution of vision. The latter lesion has been reported to occur in 14% of patients receiving chloroquine, but has been reported due to hydroxchloroquine therapy only rarely[9]. Therefore, it is recommended that hydroxychloroquine be used in a dose of 200 to 400 mgs daily, since the ocular toxicity appears to be dose related[8]. Patients should be carefully examined by an ophthalmologist every three to six months to monitor for ocular changes. Photophobia, blurred distance vision and the occurrence of streaks and flashes of light may be early symptoms of ocular toxicity[10]. Gastro-intestinal complaints, such as anorexia, nausea, diarrhea and abdominal pain may be minimized by taking the agent with food or by dosage reduction. Bleaching of hair and patchy alopecia have occurred rarely. Transient weakness of skeletal muscles, myopathy, seizures, emotional irritability, vertigo, and pleoporphic skin eruptions have been described rarely, but all have been reversible on discontinuation of the drug.

Gold Toxicity

***Dermatitis**
***Stomatitis**
Nephritis
Blood dyscrasia (thrombocytopenic purpura, aplastic anemia)
Eosinophilia
Vasomotor reactions (giddiness, warmth, vertigo)
Peripheral neuritis
Chrysiasis (corneal deposition)
Diarrhea

Gold. Gold salts have been used in the treatment of rheumatoid arthritis since 1927 and have been shown to be of benefit in a majority of patients over at least an 18-month period[11]. Dermatitis is the most common toxic effect of gold and is almost always associated with pruritis. Without pruritis it is unlikely that dermatitis occurring during gold therapy is caused by the drug[12]. This side effect may be circumvented sometimes by temporarily discontinuing the drug and then resuming a smaller dose, but a recurrence of the rash may force discontinuation of gold therapy. Stomatitis may also result and frequently is preceded by a "metallic taste," the lesion may become chronic unless the drug is discontinued or reduced. Toxic nephritis and nephrosis may result from gold therapy rarely and are usually manifested by albuminuria and hematuria. A urinalysis should be performed weekly for the first six weeks of gold therapy and then fortnightly thereafter to monitor for renal damage. Blood dyscrasias due to gold toxicity occur rarely, but may be serious unless promptly and effectively treated. Thrombocytopenia purpura, aplastic anemia and granulocytopenia have all been reported and therefore a white blood count and differential count should be performed weekly initially and then fortnightly thereafter as a precaution. Vasomotor reactions, such as generalized warmth, giddiness, erythema and vertigo may occur transiently during the early weeks of gold therapy, but should not interrupt the regimen[12]. Peripheral neuritis has been reported rarely. Chrysiasis (deposition of gold in the cornea) has been reported to cause blurred vision occasionally and may force discontinuence of the drug[13]. The occurrence of diarrhea may also force discontinuence of the drug. To avoid toxicity, it seems reasonable to use the smallest amount of gold that gives clinical benefit; usually 25 mgs weekly for 16 weeks and then 25 mgs every two or three weeks as a maintenance dose.

Corticosteroid Toxicity

***Gastro-intestinal ulceration**
***Osteoporosis**
***Impaired carbohydrate tolerance**
***Cushingoid features**
Psychosis and other psychic disturbances
Posterior subcapsular cataracts
Edema
Hypertension

Corticosteroids: Corticosteroids may have a dramatic anti-inflammatory effect in patients with rheumatoid arthritis but their long term use may be associated with such serious side effects that this agent should be reserved as a last resort in the treatment of rheumatoid arthritis. Emphasis has been placed on not exceeding a dose of 7.5 mgs of prednisone daily (or its equivalent) for males and premenopausal females and 5 mgs daily for postmenopausal females in an effort to minimize the toxic effects of the drug[14]. The risk of peptic ulceration may be lessened by the routine use of antacids but, in addition, patients should be carefully monitored for evidence of gastrointestinal hemorrhage. Osteoporosis and spontaneous fractures, especially of the bodies of the vertebrae of the dorsal and lumbar spines, appear to be associated with long term corticosteroid therapy. A variety of mental disturbances may result from use of the agent: restlessness, insomnia, and agitation as well as overt psychoses[15]. The risk of infection with a variety of opportunistic organisms, especially fungi and gram negative bacteria, appears to be increased in patients on corticosteroids. Subcapsular cataracts have been reported to occur in as many as 20 per cent of patients on

the drug, and there is no evidence that the cataracts regress on discontinuation of corticosteroids[15]. In addition, hypertension, carbohydrate intolerance, edema and cushingoid features may result from the use of corticosteroids.

Phenylbutazone Toxicity

***Gastro-intestinal (epigastric distress, nausea, vomiting, aggravation of peptic ulcer)**
Edema due to salt retention
Skin rash with pruritis
Bone marrow suppression
Headache and vertigo
Stomatitis

*** Denotes more common toxic effect.**

Phenylbutazone. Phenylbutazone has not been used routinely in the treatment of rheumatoid arthritis but may be of use on a short term basis in the treatment of an acute exacerbation. Gastro-intestinal toxicity (nausea, vomiting, epigastric pain) accounts for about two-thirds of all of the toxic effects of the drug[16]. A pre-existing ulcer may be aggravated and occasionally gastro-intestinal hemorrhage may result. These side effects may be minimized by giving the drug with meals and routinely using antacids. Approximately 5 per cent of patients will develop maculopapular rash with pruritis which usually necessitates discontinuation of the drug[16]. Edema accumulation may result due to sodium retention but usually can be controlled by utilizing a low sodium diet. Bone marrow suppression due to the drug may result in aplastic anemia, therefore, patients receiving phenylbutazone should have complete blood counts regularly. Headache and vertigo occur fairly commonly and stomatitis less commonly; all disappear on discontinuation of the drug. Because of the potential serious toxic effects of phenylbutazone, it seems wise to use the drug in the smallest effective dose over a relatively short period.

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(Continued on Page 234)



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In his daily practice the physician witnesses the human suffering caused by uncontrolled fertility. Perhaps one of its most tragic effects is the unwanted child, who so often experiences parental rejection. The rejected child in a family may be neglected, nagged and severely punished. Sometimes he is criminally abused. Child abuse is common enough to have become a separate clinical entity: the "battered child" syndrome. Reliable statistics are difficult to obtain, but it has been estimated that in this country alone roughly 10,000 children are "battered" per year, and their number may be increasing.

A revealing picture of child abuse patterns is provided by one study of the American Humane Society. More than half of the 662 children involved (all reported in newspapers within a single year) were less than 4 years of age. One fourth of the battered youngsters died; most of these deaths were of children less than 2 years of age. Fathers were more often guilty of child abuse than mothers, but sometimes both parents participated. The study indicated that battered children are not limited to any particular socioeconomic stratum.

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Actions — Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note — Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication — Ovulen and Demulen are indicated for oral contraception.

Contraindications — Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings — The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about seven-fold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions — The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives — A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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1A5

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—Sir William Osler, 1909

Three Sons Go With Him When Dr. Yohn Flies!

It's probably exaggerated . . . like some of Ralph Nader's pronouncements on medicine.

But one flying doctor's answer to the conundrum: "What are the two most dangerous combinations known to man?" was:

A tenant farmhand at the wheel of an ancient truck!

And: A doctor at the controls of an airplane!

Kenneth Crawford Yohn, M. D., of Eufaula obviously thinks that, if the foregoing is so, he is "the exception that proves the rule." Not only does he trust himself in the airplane that he is flying, but his three sons also.

He failed to mention whether Mrs. Yohn made the family's faith in him unanimous.

The son of a Baptist minister, Dr. Yohn was born in Dothan in 1936. He finished high school in Troy, attended Troy State, went from there to Howard College, the Baptist school in Birmingham that is now Samford, and attended the UAB Medical College, from which he was graduated with his M. D. degree in 1962.

At that point the Navy took over his career. He interned in the Navy Hospital at



DR. KENNETH CRAWFORD YOHN

Portsmouth, from there going to the School of Aviation Medicine in Pensacola. As he had joined the Navy, the Navy decided then

(Continued on Page 204)

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You'll rely on MINTEZOL (Thiabendazole, MSD) often for pinworm disease. Not just because that's a very common helminthic infestation, but because MINTEZOL has such a high degree of efficacy.

MINTEZOL also provides an unusually wide range of action—against threadworm, hookworm, whipworm, and large roundworm disease. This broad spectrum of activity makes it particularly effective in these mixed worm infestations.

MINTEZOL isn't a dye. So you won't hear complaints about stained teeth, clothing, or bed linen. The most frequently occurring side effects have been anorexia, nausea, vomiting, and dizziness.



Contraindications: History of hypersensitivity to thiabendazole.

Warnings: May impair alertness; operation of automobiles and other activities made hazardous by diminished alertness should be avoided. If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed; erythema multiforme, including Stevens-Johnson syndrome (with a fatal case), has been associated with thiabendazole therapy in children. Safe use in pregnancy or lactation has not been established.

Precautions: Since thiabendazole is metabolized in the liver and excreted by the kidneys, hepatic and renal function should be carefully monitored in patients with dysfunction of these organs.

Adverse Reactions: Frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, collapse, abnormal sensation in eyes, blurring of vision, hyperirritability, numbness, hyperglycemia, xanthopsia, enuresis, perianal rash, cholestasis and parenchymal liver damage, hypotension, and a transitory rise in cephalin flocculation and SGOT. Hypersensitivity reactions include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy. Appearance of live Ascaris in the mouth and nose has been reported on rare occasions.

Some patients may excrete a metabolite which imparts an odor to urine, much like that which occurs after ingestion of asparagus. Crystalluria without hematuria has been reported on occasion, but has promptly subsided with discontinuation of therapy; while the etiologic role of thiabendazole has not been established, the possibility of crystalluria should be kept in mind. Transient leukopenia has been reported in a few patients, but the cause and effect relationship in these cases has not been established.

NOTE: In children weighing less than 30 pounds, clinical experience with thiabendazole for treatment of intestinal parasitosis has been limited. Thus, the benefits of this therapy should be weighed against the possibility of adverse reactions.

Supplied: Suspension, containing 500 mg per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

(Continued from Page 201)

that he should see the world. He went to the Aleutians first, and then to southeast Asia, with a tour of duty in Vietnam.

As Flight Surgeon for the Blue Angels in Pensacola (1966-67), he got to know one of the most celebrated aerobatics teams in world history; and the fact bore fruit last April, when his adopted town, Eufaula, made him chairman of the Air Show committee for "Admiral Moorer Days," and he brought his former charges over to put on a thrill show. He went to Eufaula after separating from the Navy in 1967.

Dr. Yohn is married to the former Charlotte Motes of Troy, and there are three sons: Mark, 12; David, 8; and Christopher, 6. Their shared enthusiasm is Little League baseball . . . but only when dad isn't around to take them flying.

As one might suspect, this Barbour County general practitioner learned to fly in the Flight Surgeons' School. He holds a private pilot's license. And one of his two partners in the ownership of a Cessna 210 is a Eufaula dentist.

Membership in two other medically-oriented organizations, ALAPAC and AAGP, emphasize his other interests. For AAGP, he is presently vice president for the Southeastern district.—M.

Urban Renewal or Removal?

Instead of improving the nation's urban housing problems, certain HUD programs have actually reduced the number of living units. The General Accounting Office reports that in 324 cities surveyed, HUD demolished 214,000 dwellings for low and moderate income families, building only 124,000 replacements.

—Illinois Medical Journal.

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Laboratory Tests For Hepatitis-Associated Antigen*

By Ruby Atkins, Gary Tomlin** and
Russell W. Currier, II, D. V. M.***

In December of 1970 the first report of the status of testing for hepatitis-associated antigen (HAA) was made by the Bureau of Laboratories. At that time it was our opinion that tests should be considered in the developmental stage and not ready for routine use.

Some of the diagnostic tests which have been developed thus far utilize immunodiffusion, counterelectrophoresis, complement fixation, radioimmunoassay, electron microscopy, immune electron microscopy, platelet aggregation reaction, fluorescent antibody techniques and passive hemagglutination.

Recently an *Ad Hoc* Committee on Hepatitis-Associated Antigen Tests of the National Research Council reviewed the results of a comparative sensitivity survey involving the more commonly used tests, and their recommendations are as follows:

1) As soon as practicable, all blood banks begin routine Australia antigen testing of blood donors with commercial supplies of antiserum licensed by the Division of Biologics Standards or with locally prepared antisera of equivalent quality, recognizing that rapid and possibly fundamental methodologic changes may occur in the next few years. A commercial antiserum should be used only with the test methods for which it is recommended.

2) If test results are required rapidly, blood banks introducing routine screening begin with the counterelectrophoresis test. The immunodiffusion test is useful if test results are not needed rapidly, and it could be used for confirmatory tests in reference laboratories.

3. The complement fixation, hemagglutination inhibition, radioimmunoassay tests

(Continued on Page 208)

*Interchangable terms: serum hepatitis or SH antigen, hepatitis-antigen, Australia/SH or Au/SH, and hepatitis-associated antigen (HAA).

**Microbiologists, Bureau of Laboratories, Alabama Department of Public Health.

***Epidemiologist, Alabama Department of Public Health, (U. S. Public Health Service).

THE NIGHT SHIFT OF DEPRESSION...

Depression is a 24-hour-a-day problem... and disturbed sleep is often its nocturnal expression. In fact, such disturbance may be a key symptom in establishing the diagnosis of depression.



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TABLETS: 10 mg, 25 mg, and 50 mg
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When depression is serious enough to warrant medication, ELAVIL HCl may prove extremely helpful. Unlike psychic energizers or agents that merely elevate mood, ELAVIL HCl embodies a mild antianxiety action which manifests itself even before the fundamental antidepressant activity of the drug becomes evident. Daytime drowsiness occurs in some patients, usually within the first few days of therapy.

NOTE: Not recommended during the acute recovery phase following myocardial infarction. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible. Should not be given to patients who have received an MAOI within two weeks.

Contraindications: Known hypersensitivity. Should not be given concomitantly with or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor. Then initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.

Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with narrow-angle glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.

Precautions: When used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase, and paranoid delusions, with or without associated hostility, may be exaggerated; in any of these circumstances, it may be advisable to reduce the dose of amitriptyline HCl, or to use a major tranquilizing drug, such as perphenazine, concurrently.

When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible.

Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered.

Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.

How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-cc vials containing per cc: 10 mg amitriptyline HCl, 44 mg dextrose, and 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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are not to be adopted for general use in blood banks unless procedures are developed that make them practical. (However, laboratories and blood banks that are already using, or have the capabilities to begin using, these tests are encouraged to do so.)

After a careful review of the relative merits of testing procedures which have been described, our decision was to put into operation the method utilizing immunoelectroosmophoresis in agar gel. Small amounts of antigen can be detected by specific precipitation with antibody at the end of one hour whereas the conventional two-dimensional immunodiffusion and the complement fixation tests require over night incubation for maximal sensitivity. In addition to the rapid detection of antigen, nonspecific reactions are not encountered, the test is 10 times as sensitive as the Auchterlony double diffusion method, small amounts of reagents are required, the antisera need not be of extremely high titer, and a large number of specimens can be tested simultaneously.

After the decision was made to use the counterelectrophoresis test, and the cost of equipment was considered ($550.00 if purchased commercially), part of the system was improvised. By buying an unassembled power supply and making the trays, template and plates, testing was initiated for a total cost of $75.00 exclusive of reagents.

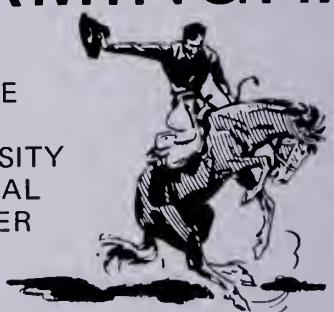
During April and May serological testing for syphilis was done on the entire Alabama prison system. In order to determine the incidence of HAA in a population of this kind, serums were split and tested for HAA also. The number of specimens tested totaled 3,679, and the results of HAA testing are shown in the following table.

SOURCE	TOTAL SPECIMENS TESTED	POSITIVE	PERCENT POSITIVE
Holman	689	32	4.64
Atmore	986	24	2.43
Draper	788	12	1.52
Tutwiler	129	1	0.07
Mt. Meigs	417	10	2.40
Lee Youth Camp	57	1	1.75
Road Camps	613	13	2.12
	3679	93	2.13
			Average positive

This table shows the highest incidence of HAA in the maximum security unit (Holman), the lowest in women prisoners at Tutwiler, with the younger, less serious offenders in between.

Serums found positive for HAA were con-

(Continued on Page 212)

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hyoscyamine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
atropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital (warning: may be habit forming)	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.

Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

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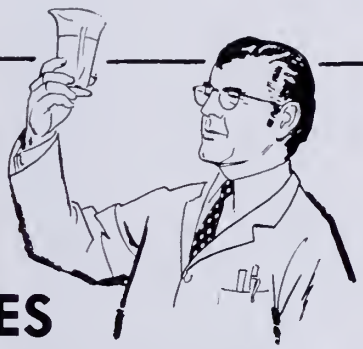
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(Continued from Page 208)

centrated with Lyphogel and tested for the presence of antibody by placing them on the anode side of the plate and electrophoresing against a dilute antigen. As anticipated, no serum was found to contain antibody since it is not usually found in persons other than those who have received multiple transfusions.

After the prison study was completed, a smaller number of serums were collected at random from samples submitted to the laboratory for syphilis serology. This study included males over 18 years old, both black and white. Testing revealed only one positive for HAA, or an incidence of 0.5 per cent among the male population in general. The incidence in the "normal" North American population has been reported to be relatively rare or 0.1 per cent.

Statistics gathered from these investigations reveal the fact that in prisoners in the state the incidence of HAA ranges from one-half that of the normal population (Tutwiler) to 9.5 times the number found in the normal group (Holman), with an average slightly more than 4 times that of the normal specimens tested.

The Bureau of Laboratories in Montgomery is presently accepting specimens from suspected cases of HAA. When interpreting the reported results, however, it should be borne in mind that some positive specimens are not detected by the best techniques currently in operation. Negative reports, therefore, do not mean the specimen could not have contained HAA.

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Blumberg, B. S., A. I. Sutnick, and W. T. London. 1970. Australia antigen as a hepatitis virus. Variation in host response. American J. Medicine. *48:* 1-8.

SALUTENSIN®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg./ protoveratrine A, 0.2 mg.

Brief Summary of Prescribing Information—9-9/22/69.
For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: *Hydroflumethiazide:* Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

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Alabama Department of Public Health

ADPH Applauds Discharge Planning And Referral System

By Joyce Murphree*

To insure patients of uninterrupted care after leaving the hospital, the Alabama Department of Public Health is encouraging a discharge planning and referral system. Two of every three patients hospitalized need some type of care after leaving the hospital, estimates Mrs. Anne Smith, director of the Bureau of Public Health Nursing. Discharge planning is a part of the trend toward community aspects of health care, she noted.

"We cannot cut off concern when patients leave the hospital," Mrs. Smith commented. "Two out of three need instruction, equipment, treatment, or other care. Few can afford to remain in the hospital until all their needs are met, and in many instances patients improve faster at home."

Although several counties had already initiated programs of discharge planning, the concept became widespread following in-service educational sessions sponsored by the State Board of Health's home health agency last fall. Among the counties really working in this area are Etowah, Jefferson, Lamar, Dallas, Montgomery, Autauga, and Madison. Others are making progress or initiating discharge planning. "We have a long way to go," Mrs. Smith said, "but we feel that much progress is being made in real continuity of care."

"Team work between health agencies in Huntsville is resulting in quality patient care at less cost," she pointed out. "We have the nucleus of an excellent program in Huntsville." Madison is one of the more organized counties. Its discharge planning and referral system was begun several months ago under the leadership of Mrs. Helen King, consultant nurse with the state health department based in Huntsville.

The consultant nurse initiated discharge planning and referral in Madison County last November when she invited representatives of hospitals and other health agencies to attend an in-service training session. "We realized that there was a gap in the continuity of care of patients," Mrs. King explained. "There was a lack of coordination between hospitals, nursing homes, vocational rehabilitation, public health, and other agencies providing health services.

"Medicaid and Medicare made us more aware of this gap," Mrs. King added. "Medicare patients have a maximum period of 14 days to apply for home health services after discharge from the hospital. A patient could be discharged from the hospital and at home for several weeks before the public health nurse was aware of it. Although patients

*Information Specialist, Alabama Department of Public Health.

were advised to contact the county health department for home health services, many times they did not until they had problems. Many problems could have been prevented if the patient had been receiving care through home health services."

Huntsville Hospital, the city's largest medical facility, began a discharge planning and referral system in January. In the following five-month period, the hospital referred approximately 100 patients to other agencies in the Huntsville area. Most of these were referred to nursing homes. Others were referred to the Madison County Health Department for home health services, to the HOPE program, to the vocational rehabilitation service, and to the county office of the Alabama Department of Pensions and Security.

For those patients who return to their homes, the Huntsville Opportunity Program for the Elderly (HOPE) provides supportive services. Through HOPE's "Meals on Wheels" service, the patient may receive a hot meal delivered to her home. The cost of the meals is based on a sliding scale, according to the patient's income, and varies from 10 cents to one dollar. If the patient has particular dietary needs, as a diabetic, the meals are prepared according to the physician's instructions.

HOPE volunteers will also telephone patients living alone at an agreed upon time each day to check on their well being. Transportation to a physician's office is also provided by HOPE.

Mrs. Gwen Hulsey, administrative supervisor of the medical units and chairman of the hospital's discarge planning committee, said, "Our nurses are really interested in after-care of the patients. We feel that we have an obligation to the patients even after they are discharged to see that they receive proper care."

The typical patient who requires after-care is elderly and chronically ill. He may also

(Continued on Page 221)

Pre-Sate® (chlorphentermine hydrochloride)
Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

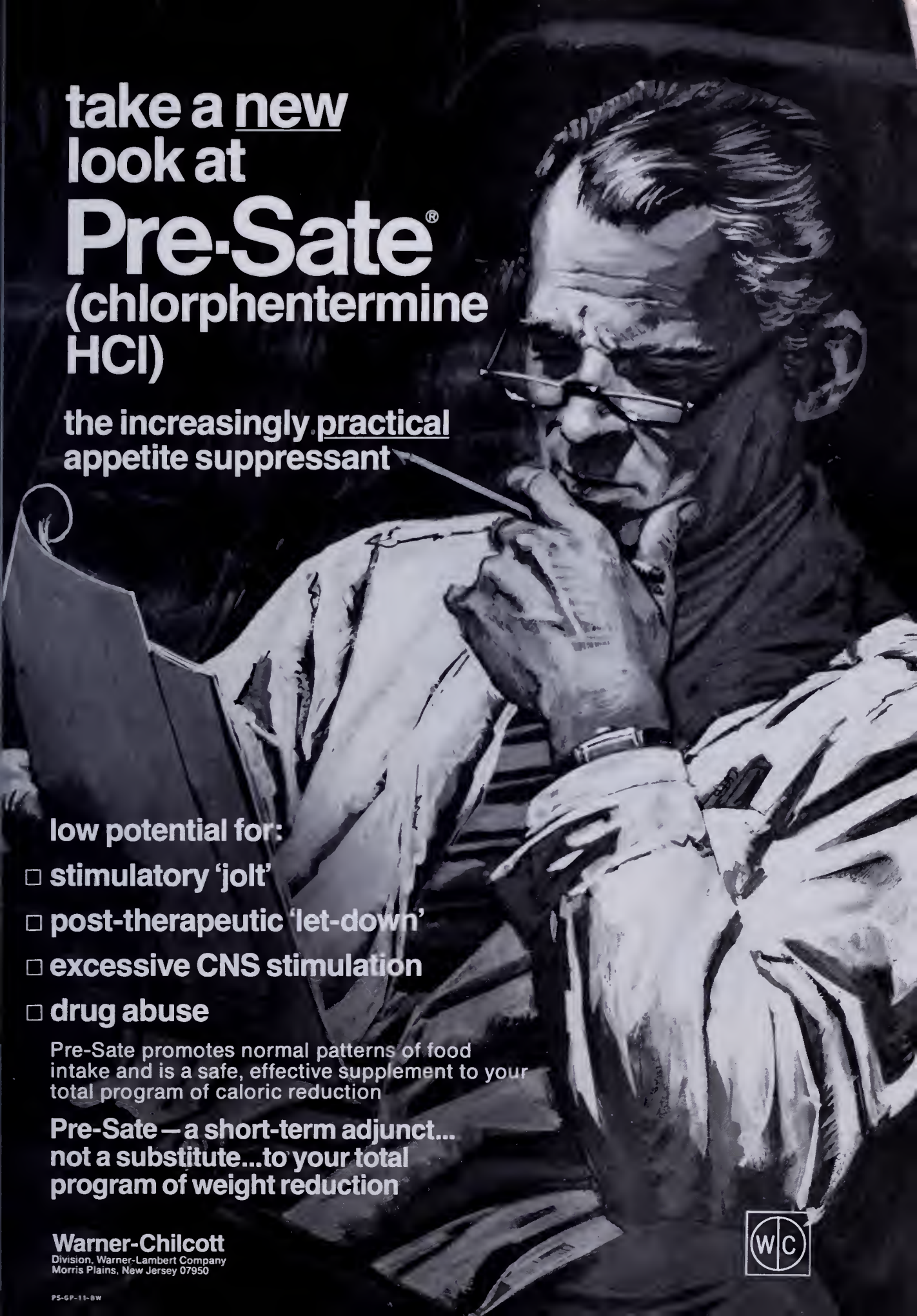
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
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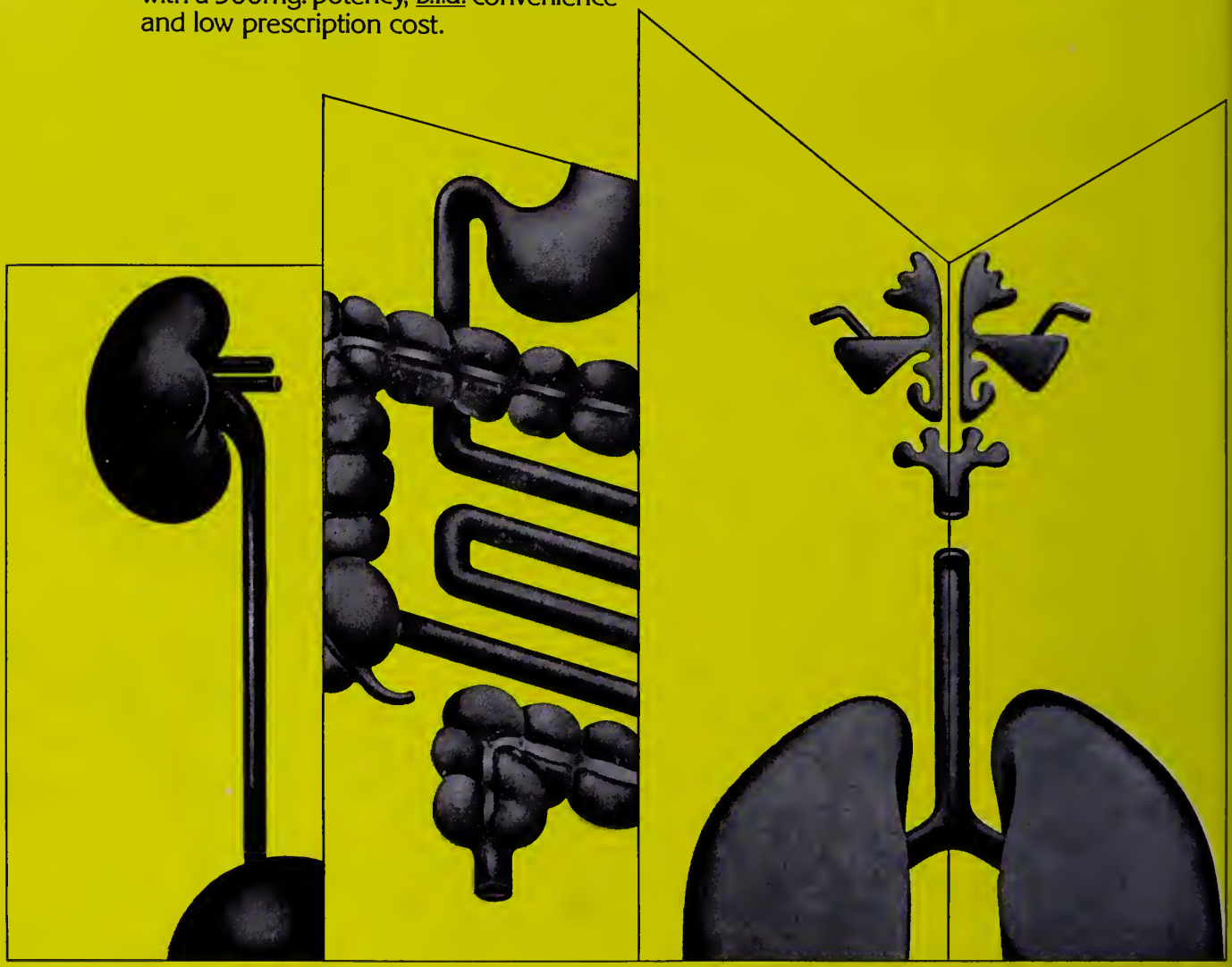
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Also infections due to Gram-positive and Gram-negative organisms, when bacteriologic testing indicates appropriate susceptibility to the drug.

Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary with prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfection may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for at least 4 months.

Plasma prothrombin levels may be depressed, patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, periodic laboratory evaluation of hematopoietic, renal and hepatic organ systems should be performed.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. Infants may develop increased intracranial pressure with bulging fontanels. Hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia have been reported.

Usual Dose: *Usual Adult Dose:* One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

Supplied: Capsules—250 mg. in bottles of 16 and 100. bidCAPS—500 mg. in bottles of 16 and 50.

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Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with orthritis, diabetes, varicose veins, thrombophlebitis, arteriasclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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Specific therapy for night leg cramps

(Continued from Page 216)

be indigent and have no family willing or able to assume responsibility for his care. However, discharge planning is beneficial under other circumstances, too. A new mother, for example, may be referred to the county health department for follow-up.

Discharge planning begins with the unit nurse, who discusses referral with the patient's physician. With the physician's approval, the unit nurse recommends those patients who will need some type of health care after discharge. Case histories of patients recommended for referral are reviewed by the discharge planning committee, which is composed of a representative of the business office, the physical therapist, a public health nurse, a representative of the HOPE program, a secretary, and two physicians. A plan of care is developed, taking into consideration the patient's family status, socioeconomic status, living arrangements, emotional needs, and physical needs.

Mrs. Faye Wilkins, a hospital staff secretary, has the responsibility of making arrangements for the patient's discharge and referral to another agency. Mrs. Wilkins, who has a degree in sociology, said referral is a time-consuming task, but it has not been necessary to hire additional personnel. Discharge planning has become part of the routine for all staff members concerned.

A public health nurse visits the patient in the hospital before discharge to evaluate his need for home care and help make the transition from one agency to another. The public health nurse may also visit in the home before the patient is discharged to evaluate the home situation. If the patient is being transferred to a nursing home, a representative of the nursing home may also visit the patient before discharge.

"Most of our elderly patients don't know which way to go," Mrs. Hulsey commented. "Many of them don't have relatives willing or able to take care of them at home. They are grateful someone is interested in them and appreciate our efforts to see that they are taken care of after they leave the hospital."

Indigent patients, many of whom lingered longer than was really necessary, were costing the hospital money before discharge planning was initiated, said Paul Miller, business manager of the hospital. "We had one patient here for five months and another for four months, who were unable to pay their bills after their Medicaid coverage ran out," Mr. Miller continued. "After we began our system of discharge planning, they were placed in nursing homes almost immediately."

Discharge planning has also reduced the number of repeat admissions to the hospital. Mrs. Hulsey recalled the case of a 12-year-old diabetic who was admitted to the hospital

(Continued on Page 222)

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(Continued from Page 221)

in a coma frequently over a long period of time. After the child was placed in home health services, she was not treated for diabetic coma for five months.

The Huntsville Hospital staff routinely reviews the patients who have been hospitalized for 10 days to determine whether they can be discharged. Hospital beds are better utilized, making them available for patients who really need hospital care.

Patients admitted to a nursing home or to home health services receive care according to their physician's written instructions. The hospital sends a copy of the patient's history and physical, the physician's orders, and nursing care plan to the nursing home or to the county health department.

Many patients simply don't know about the services available from other agencies or how to take advantage of them, Mrs. King pointed out. After they have been assured that they are going to be taken care of, there is little resistance to being discharged from the hospital. Discharge planning and referral is a service for the patient, Mrs. King stressed.

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Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is painrelated, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

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Russell Garnet Hightower was born on a farm near Moulton, Ala., Oct. 6, 1909, and after graduating from high school, left the farm to study pharmacy at Auburn, finishing in 1930. It was just as the effects of the market collapse and panic were beginning to seep into Alabama.

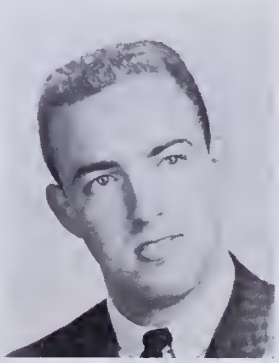
He practiced pharmacy for two years in Anniston, meantime receiving the Lehn and Fink medal for advancement of pharmaceutical science. Deciding to respond to the lure of medicine, he left the practice of pharmacy in 1932 to enter the UAB School of Medicine, after two years transferring to Rush Medical College in Chicago, from where he received his M. D. degree in 1936. Here he became a member of Alpha Omega Alpha.

The next year Dr. Hightower was married to Miss Margaret Ross of Athens, Ala., an alumna of Athens College and of the University of Alabama, from which she was graduated in 1929. The future Mrs. Hightower taught Latin and English between the time of her graduation and her marriage.

Dr. Hightower interned and served his residency in EENT, at Lloyd Noland, Fairfield, saw duty in the armed services from 1942 to 1946, and returned to Birmingham in private practice for a year before moving to Florence, where he has been associated with the Florence Clinic, with the EENT department, ever since, nearly a quarter of a century.



DR. R. G. HIGHTOWER



DR. D. R. HIGHTOWER



DR. R. R. HIGHTOWER

A Diplomate of the American Board of Otolaryngology, a member of the Lauderdale Medical Society, of the Medical Association of the State of Alabama, of AMA, of SMA, and the American Academy of Ophthalmology and Otolaryngology, Dr. Hightower lists his hobbies as fishing, hunting, and "growing azaleas at home."

The Hightowers' firstborn arrived July 14, 1939, in Birmingham, named Daniel Russell. From Coffee High School, Florence, he went

immediately to Vanderbilt for both pre-med and medicine, receiving his M. D. degree in 1969. Serving his internship and residency in Otolaryngology, he is presently in the armed services, serving in the 225th Station Hospital, Munich, Germany.

Dr. Dan Hightower is married to the former Jane Hughes of Memphis, Tenn., the daughter of James D. Hughes, M. D., a past president of the Academy of Pediatrics. Mrs. Hightower is an art graduate of Vanderbilt. They have two daughters, Elizabeth, 4, and Margaret Anne, 6 months.

The younger son, named Robert Ross Hightower, was born April 10, 1945, also at Lloyd Noland, Fairfield. He was graduated from Coffee High in 1963, from Vanderbilt with his baccalaureate in 1967, and from UAB Medical School in 1971. He is presently interning in Pediatrics Affiliated Hospital, Salt Lake City. Ross was one of three organizers of the YMCA in Florence, attended Summer YMCA work at Blue Ridge, N. C., and toured the southeastern United States with foreign students under a YMCA-sponsored program. He is unmarried.

Both young doctors are school athletes. Both have played basketball, football and baseball, Dan with his letter in baseball from Vanderbilt. Both play golf. And both are enthusiastic skiers, though Ross is just learning the intricacies of it. Both also have inherited their father's liking for fishing.—

—W. J. M., Jr.

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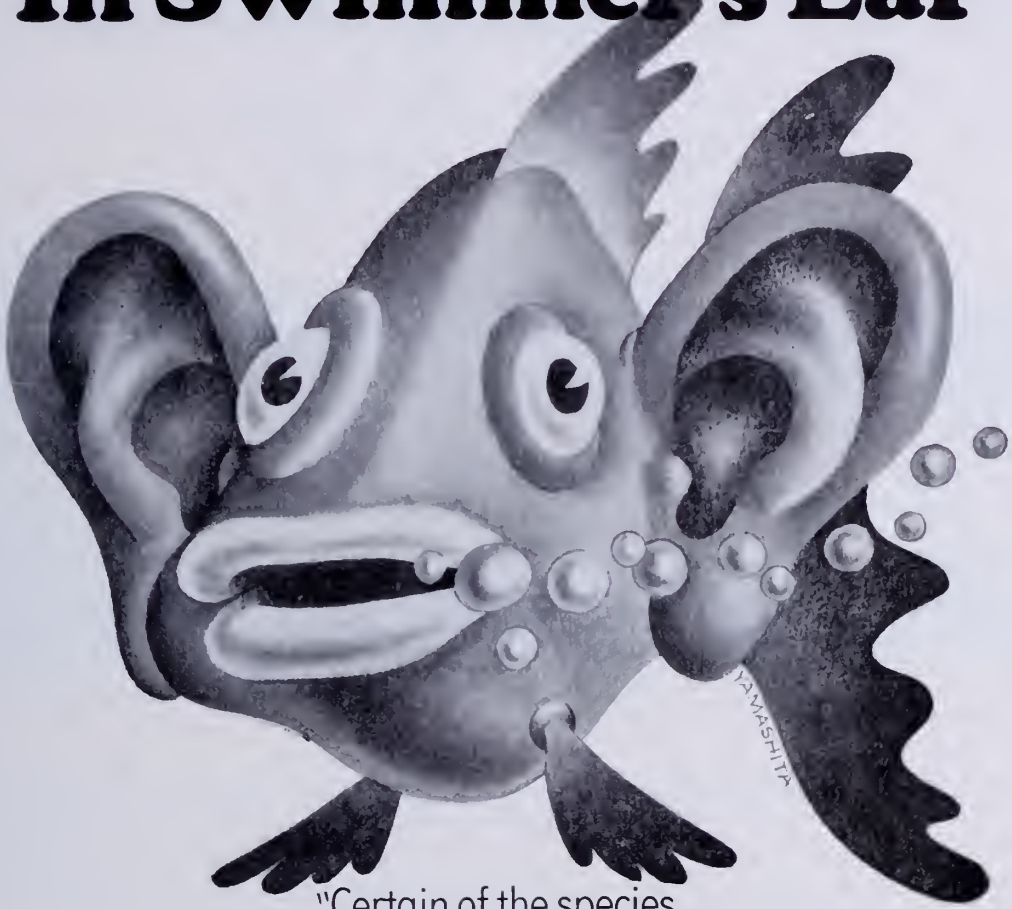
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Located at the city limits in east Statesboro on an eleven acre tract of woodland in a quiet, secluded area containing a lake, the single story, multi-level hospital consists of a detoxification section and a residential care section. The detoxification unit is equipped and staffed for the withdrawal treatment of any type of intoxication including alcohol, narcotics, sedatives, tranquilizers and other drugs or combinations.

The residential care unit is composed of 26 private rooms with private baths convenient to a comfortable lounge and arranged to achieve an intimate home-like atmosphere. All living units are individually decorated and furnished. No two are alike. Wall to wall carpet throughout.

There is a large day room, inside and outside patios, a dining room where home cooked meals are served, a library and conference rooms. The building is all electric, completely air conditioned with individual controls, and is protected by a modern sprinkler system in all areas.

Male and female patients are admitted to the detoxification unit for withdrawal. When this phase is completed, they are transferred to the residential care unit for continuation of rehabilitative therapy.

The Willingway treatment program operated successfully at another location in Statesboro for four years before moving to the new facility.

Requirements for admission. To be admitted all new patients must agree to the following:

1. Stay 28 days.
2. No telephone calls.
3. No visitors.
4. No automobiles.
5. Pay for 28-day program at time of admission.

Incoming and outgoing mail is not restricted. Mail is not read or censored. No one is admitted for detoxification only.

For rates and information write to:

WILLINGWAY
P. O. Box 508
Statesboro, Ga. 30458

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Mrs. Dorothy R. Mooney
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IN EMPHYSEMA



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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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First choice

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When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

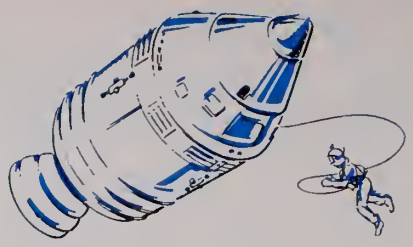
MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

Senior Of Eleven Doctors In 1972 Fifty-Year Club

Dr. James E. Whitaker of Huntsville is the unchallenged senior of the current eleven doctors to be inducted into MASA's exclusive 50-Year Club when the Association holds its next annual meeting, in April, 1972, in Montgomery.

This September issue of The Journal will be off the presses and in the hands of Alabama doctors just two weeks before this Huntsville general practitioner and surgeon celebrates his 82nd birthday.

James Ezekiel Whitaker was born on a farm near the Alabama community of New Hope, in Madison County, Sept. 24, 1889. Graduating with his baccalaureate from Berea College, in Kentucky, he entered the teaching profession in frontier Oklahoma, when that state was just six years old, later returning to Marshall County, Ala., to teach before determining late to enter the field of medicine. He received his M. D. degree from Tulane in 1922.

Two years after his first wife, Cora (Buford) Whitaker, died in an automobile accident in 1950, Ann Shrader of Huntsville became Mrs. James E. Whitaker. There are no children by either marriage.

This Huntsville physician's hobbies are hunting (as you might guess from the accompanying picture), "fishing, farming and work!" He used to play golf but that was a long time ago.



DR. J. E. WHITAKER

The ways of a nation, like the moods of a woman, often defy description.

—Eli Ginzsberg
Bulletin of the
N. Y. Academy of Medicine

Citizens Have The Power

"When the majority of our citizens really wants budgets balanced and inflation stopped; wants to protect the American dollar and the industries that support it, and wants to move toward equity and balance in our tax system, they can have it and quick. But so long as every group seeks its own advantage first, politicians will respond and we will be unable to do little more than to continue to tinker and fumble with the tax laws. We are not your bosses; you are ours."

—Sen. Wallace Bennett (R-Utah).
—Illinois Medical Journal.

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when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent as anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 10 mg. daily have little effect in producing creatinuria.

Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, anogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.

Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

Supplied *Tablets: 2 mg.*, scored—bottles of 100./*5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.

For additional product information, see your Upjohn representative or consult the package circular.

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A68 7627-R MED 8-5-5 (LQX)

Guidelines For Committeemen

Having served on various committees, I have drawn up a list of rules. Never arrive on time; this stamps you as a beginner. Don't say anything until the meeting is half over; this stamps you as being wise. Be as vague as possible; this avoids irritating the others. When in doubt, suggest that a subcommittee be appointed. Be the first to move for adjournment; this will make you popular; it's what everyone is waiting for.

—Harry Chapman

I would say there isn't a critical shortage of nurses but more a shortage of nursing. Nurses are often engaged in such non-nursing jobs as desk work and filling out records. I realize all these tasks are important, but I think we need to look at who is doing what . . . The jobs could well be done by a person who has no nurse's training at all.

—Mary Gertrude Healy

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"Where the Action Is!"

(Continued from Page 196)

Physicians Wanted

Special Openings—

Community of 3 adjoining towns with a total population of 30,000 and outlying rural area of 20,000, located in Northwest Alabama, with needs for General Practitioners and specialists including Otolaryngology, Internal Medicine, OB-Gyn, Pediatrics, Psychiatry, Surgery, Urology and Orthopedics. 2 modern hospitals with total beds of 351 and plans for a 15 suite professional bldg. adjacent to one of the hospitals. Industrial area with outlying agricultural areas. Excellent recreational facilities including fishing, hunting, boating and golf. PW-13

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

Opportunity in town of 4,000 population in trade area of 50,000 population, located within 100 miles of two metropolitan areas in south Alabama. Industrial and farming area. 44-bed hospital. Office space and equipment available in new building with another physician. Several churches, schools, and service clubs. PW-1

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

For town of 10,000 population in county of 40,000 population located in scenic mountainous section of Northeast Alabama. Office space and equipment available. Hill-Burton hospital-nursing home. Expanding industries in top agricultural area. PW-1-2

Opportunity in town of 2,500 population in Northeast Alabama in trade area of 15,000 population, located 7 miles from city of 55,000, and four miles from a 300-bed modern hospital. Position available for one who has not served military commitment. Clinic building and some equipment available. Willing to build a new clinic for two doctors or a small group. Especially seeking general practitioner and internist. PW-1-7

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

Associate needed in general practice and surgery in northeast Alabama town of 6,000 population. Modern 70-bed hospital. Prefer doctor less than 40 years of age. Salary guaranteed first year, then partnership. PW-1/9

Opportunity available July 1st in town of 2500 near the Gulf. No investment required and most of the equipment is less than three yars old. Hospital in town. Emergency calls shared by four other doctors. Excellent recreational facilities. PW-1/10

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11



Empirin® Compound with Codeine, gr. ½ or gr. 1

Helps overpower pain

Each tablet contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.
No. 3 contains codeine phosphate* (32.4 mg.) gr. ½.
No. 4 contains codeine phosphate* (64.8 mg.) gr. 1.
(Warning—may be habit forming.)

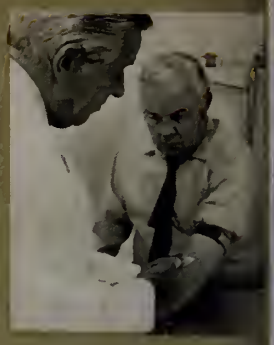
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Complete literature available on request from Professional Services Dept. PML.

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in stable adult diabetes, if diet alone fails...



start with DBI®-TD (phenformin HCl)

timed-disintegration capsules 50 mg.

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Lowers elevated blood sugar without increasing endogenous insulin secretion.

Probably, secondary to its hypoglycemic effect, decreases insulin oversecretion. This may help to reduce lipogenesis and facilitate lipolysis, which may account for the clinically reported loss of excess body weight and lowering of elevated serum cholesterol levels in overweight, hypercholesteremic, stable adult diabetics unresponsive to diet alone.

DBI®-TD
(phenformin HCl)
timed-disintegration capsules 50 mg.

lowers elevated blood sugar

ow to prescribe DBI®-TD (phenformin HCl)

start with DBI-TD

Week 1 1 capsule with breakfast may be effective, or a second capsule may be given with the evening meal.

Week 2 Continue effective DBI-TD dosage.

If necessary, add an additional capsule to the A.M. or P.M. dose.

Thereafter Continue effective DBI-TD dosage.

To transfer from sulfonylurea therapy to DBI-TD alone: The first week, withdraw sulfonylurea; start with DBI-TD as indicated in the chart.

To transfer from sulfonylurea therapy to combined therapy with DBI-TD: The first week, continue dosage of sulfonylurea; add DBI-TD as indicated in the chart. When effective regulation of diabetes is attained, sulfonylurea may be reduced and/or withdrawn.

ications: Stable adult diabetes mellitus; sulfonylurea failus, primary and secondary. **Contraindications:** Diabetes mels that can be regulated by diet alone; juvenile diabetes that ncomplicated and well regulated on insulin; acute complicions of diabetes (metabolic acidosis, coma, infection, gangne); surgery; severe hepatic disease; renal disease with mia; cardiovascular collapse, after disease states associated h hypoxemia. **Warning:** Use during pregnancy is to be avoided. il adequate data on the effects of DBI on the human fetus available, such use can be considered experimental. **Pretions: Starvation Ketosis,** which must be differentiated m "insulin lack" ketosis, and is characterized by ketonuria pite of relatively normal blood and urine sugar, may result m excessive DBI therapy, excessive insulin reduction or fficient carbohydrate intake. Adjustment of DBI-TD or lin dosage, or supplying carbohydrates, alleviates this e. DO NOT GIVE INSULIN WITHOUT FIRST CHECKING OD AND URINE SUGARS. **Lactic Acidosis:** DBI is not recmended in the presence of azotemia or in any clinical situai that predisposes to sustained hypotension that could lead actic acidosis. To differentiate lactic acidosis from ketoacidoit is recommended that periodic determinations of ketones in the blood and urine be made in diabetics previously stabilized on DBI, or DBI and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. DBI should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. **Hypoglycemia:** Although hypoglycemic reactions are rare when DBI is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with DBI. **Adverse Reactions:** Principally gastrointestinal, occurring more often at higher dosage levels; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, DBI should be immediately withdrawn. Although rare, urticaria and gastrointestinal symptoms following excessive alcohol intake have been reported. **Dosage:** 1 to 3 DBI-TD 50 mg. capsules daily. **FSN 6505-724-6331. Also Available:** DBI tablets 25 mg. **Supplied:** Bottles of 100 and 1000.

USV PHARMACEUTICAL CORP., Tuckahoe, N.Y. 10707 USV

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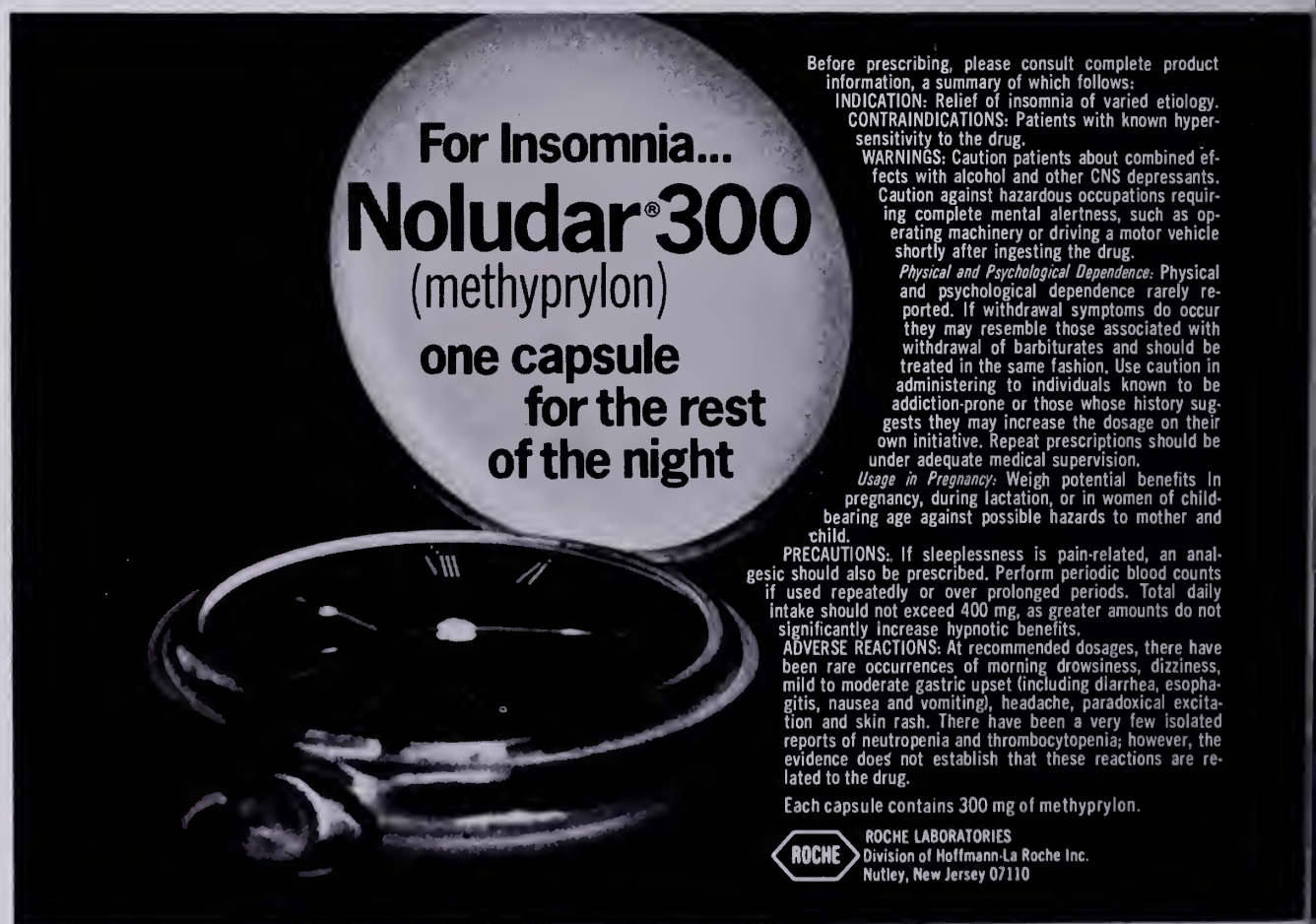
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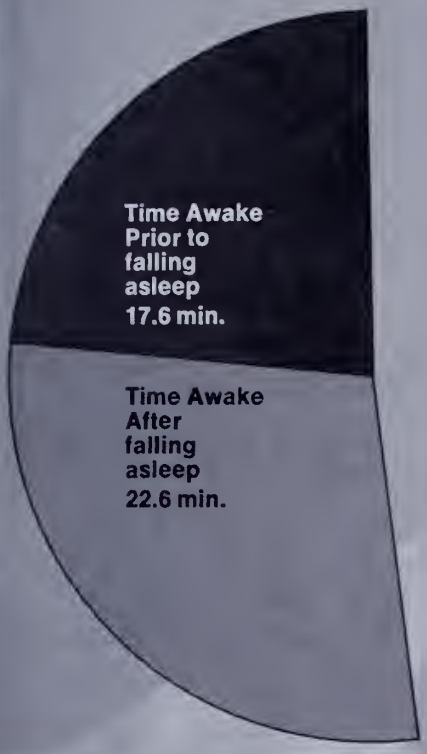
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ınd slept through the night

On
Dalmane
(flurazepam HCl)



erage sleep laboratory measurements in cited studies

rameter	Before Dalmane	On Dalmane
ne required to fall asleep	33.6 min.	17.6 min.
ke time after onset of sleep	48.7 min.	22.6 min.
mber of wakeful periods after onset of sleep	12.2	8.4
al sleep ti ne	420.0 min.	447.5 min.
al sleep percent	88.6	94.5

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

linical effectiveness as roven in the sleep laboratory

Dalmane®
flurazepam HCl)

ne 30-mg capsule h.s.—usual adult dosage.
ne 15-mg capsule h.s.—initial dosage for derly or debilitated patients.

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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • October, 1971 • No. 4

Office of Publication

19 So. Jackson St. .... Montgomery, Ala. 36104

Subscription Price ..... $5.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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1972

Delegate—E. Bryce Robinson, Jr., M. D. Fairfield
Alternate—W. E. White ..... Anniston

1973

Delegate—O. Emfinger, M. D. ..... Union Springs
Alternate—E. B. Glenn, M. D. ..... Birmingham

Delegate—Paul W. Burleson, M. D. ..... Birmingham
Alternate—J. Michaelson, M. D. ..... Foley

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President's Page



Archie E. Thomas, M. D.

The vacation season is now behind us. The heat generated by the sun in the past four months was nothing compared with that emanating from the legislative halls, which brought the medical profession in general, and the State Board of Health in particular, under the strongest attack in their histories.

At the time of this writing it is impossible to accurately assess inroads which have been cut into organized Medicine's historic position as the single controlling voice in health activities of this State.

Bills were introduced which would materially diminish Medicine's responsibility in the field of Mental Health and Public Health. Ironically, these bills won the support of many physicians who are sincerly convinced that the organizational structure of the Mental Health and Public Health Boards should be broadened to include other providers of health services and consumers.

Whether these viewpoints are meritorious will require considerable study. It was toward this end that the Medical Association of the State of Alabama urged the Legislature to take no action until such a study could be completed.

It is hoped that by the time this Journal reaches our membership a Commission will have been created and will be on its way toward determining the facts as they exist today.

Other bills were introduced which would have made Radiologic Technologists and Laboratory Technicians independent agents with a minimum of physician leadership. New boards would have been constituted for each group, having a majority of technicians, to establish policies, control licensure and dictate to the physician whom he could employ and the manner in which they would perform their duties.

The perennial chiropractic legislation appeared once again, a new attempt to put this highly questionable cultism in all future health insurance policies issued in Alabama. This has been regarded as one more step on the part of chiropractors to enhance their status and enlarge the scope of their practices. It can be safely predicted that these cultists will not stop until they are included under all health care programs now reimbursable through Blue Shield, Medicare—Medicaid, and other private and public plans.

While our Committee on Legislation, Board of Trustees, Board of Censors and the Central Office Staff—and countless individual physicians throughout the State—have been exerting valiant efforts to win passage of beneficial legislation and oppose that of deleterious nature, there has been much ac-

tivity on other fronts during the summer months.

The Committee on Insurance has left no stone unturned to obtain for the members of this Association a meaningful program of Physicians'/Surgeons' Professional Liability Insurance. As a result of their efforts, three of the nation's largest insurance carriers have developed plans tailored to the needs of Alabama physicians with pledges that premium rates will be based solely on Alabama loss experience.

But for the action of President Nixon in freezing wages, prices and rents a contract with one of the three carriers might already have been signed. In the meantime, the freeze order is due to expire November 13 and it is hoped that an Association-sponsored liability insurance program containing long-range advantages will become a reality at about that time.

To the Officers, Boards and Committees who have sacrificed their time and energies in such a magnanimous manner during these hot summer months, I express my personal gratitude. Every member of this Association is also indebted to them and I sincerely trust that when you meet one of the laborers who have worked so tirelessly in your vineyard you, also, will express your appreciation.

Sincerely yours,

Archie E. Thomas, M. D.

Archie E. Thomas, M. D.
President

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Let's Do With What We've Got

I've made three trips to your AMA offices in Chicago and countless trips to your MASA offices in Montgomery. I am consistently overwhelmed at the countless services available to you through these offices. Here is positive proof of what an organization can accomplish. Films, booklets, books, brochures, library, public services and information are only a partial list of the items available.

At a recent AMA Communications Clinic newsmen of national stature repeatedly told of the necessity of having spokesmen available quickly when news breaks to speak for medicine on the local, state and national scene. These same newsmen find these spokesmen are often impossible to find on the local scene or often are reluctant to speak. Community Service programs on drug abuse, VD, *Call the Doctor* "spots," etc. presented by county medical societies were inspiring. Again evidence of accomplishments by cohesive groups.

How many of you take advantage of these services? I was the only Alabamian present at the Communications Clinic. Your Executive Secretary was kept home by some heated medical legislation. It's true you can't make every meeting but the publications mailed to you are filled with information. Your Secretary can write special requests. You can make your views known to the men you elect. You can back these elected representatives who speak for you.



Mrs. Gilder L. Wideman

By all means don't forget using your No. 1 Auxiliary member, your wife. Send her to our Auxiliary Fall Conference in Birmingham on October 26-27th. She needs no reservation. Have her take advantage of some of the services offered by AMA and MASA. She can use some of what you have. Ask her to bring you!

Frances Wideman
President

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Sit Down And Take It? Or Stand Up And Fight?

Medicine and the military have more in common than most.

Respected to the point of reverence in times of major crisis, the two professions plummet to the depths when the threat to human welfare passes.

Rewards for success are minimal. Punishment for failure is fast and furious. The mistakes of either are apt to be decisive and deadly, the triumphs subject to review and criticism.

A dead or crippled patient, a lost cause or a disastrous fight speaks for itself, and for neither profession is there justification or retreat behind the fifth amendment.

The superficial person may challenge these professional likenesses because the military deals death, medicine life, forgetting that each deals harshly with the enemy that those who trust them may not die.

No man in his right mind enters either profession with an eye to great wealth, to a long life, or to the creature comforts of his latter days.

Where the crisis survives public fears, political meddling with either profession is often politically profitable.

And unhappily—as in other walks of life—the ranks of both professions are too often dominated by those who'd rather sit down and take it than stand up and fight.

Are There Two Doctors In The House?

Are there enough doctors already? Are statistics being misread and is the entire answer to be found in the distribution of doctors and the propped-up willpower of the public?

Last June's Sun Valley Forum on National Health, held in Idaho, came up with an array of affirmative answers, concluding that:

"A large number of Americans are over-doctored, over-hospitalized and over-drugged;" and that:

"Maldistribution of physicians, both geographically and in terms of specialties, may be at the root of complaints about a doctor shortage;" and that:

"Millions of Americans would benefit more from changing their dietary habits, losing weight, exercising, stopping cigaret smoking and cutting down or ending their consumption of alcohol and other drugs than from having more physicians and more hospitals available to treat them after their bad habits laid them low;" and that:

While "poverty itself causes much physical and emotional illness, the poor in this country probably have more access relatively to medical care than they have to most goods and services;" and that:

"The effort to solve health problems with more resources rather than through better allocation and use of resources underlies the

(Continued on Page 250)



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Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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to move,
and the Latin **sedatus,**
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Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

(Continued from Page 246)

galloping inflation which has boosted the nation's health bill to about $75 billion annually . . . with no end in the escalation in sight;" that:

"The United States' health care bill will exceed $100 billion before 1975, for . . . expenditure for medical care is a bottomless pit, while this nation's resources are limited;" and that:

"Medicaid and Medicare . . . provide hospital managers with little or no incentive for efficiency or holding down costs."

All of which is something to think about, if not to act upon.

GUEST EDITORIAL

UAB School of Medicine—After 25 Years

It was in 1943 that Governor Chauncey Sparks, addressing the Alabama State Legislature, stated: "Alabama once had a four-year medical college—we now have a two-year course. It is highly desirable that the two-year course be increased to a four-year course. I recommend to the Legislature a conditional appropriation for the construction and operation of a four-year medical school in Alabama.[1]

The Governor was not indulging in political talk. He was earnestly determined that Alabama should have a medical college of her own, modern in every respect, and in keeping with the extraordinary progress of the medical profession.

The Legislature responded to the recommendation of the Governor and the desire of the people by establishing a four-year medical college. In the same way as had been traditional in enacting health laws in this State, the school was placed in the hands of educators for administration and within the authority of the medical profession for its guidance. In 1946, this new four-year school graduated 21 physicians in its first class.

The founding of the four-year medical school had been foremost in the people of the medical profession's mind since the closure of the Birmingham Medical College and the Medical College at Mobile. The physicians of the State were aware that the quality of medicine practiced in the State was directly related to the leadership of a first rate medical school, and working through the years they had laid the ground work for such a school which culminated in Governor Spark's remarks to the Legislature in 1943.

It would seem timely now to examine the accomplishments of this school founded only a quarter of a century ago—not the buildings or its plans for the future—but its accomplishments to date. Has it served its purpose by furnishing practicing physicians for the State? Though difficult to quantify, has the expenditure of so much funds and energy increased the quality of medical care in the State?

Of the 1,525 physicians graduated from the Medical School in Birmingham within the period, 1946-1970, there are 1,492 living, of which 76 are serving in the Armed Services of the country. Of the remainder, 936 have remained in Alabama.

Some recent statistics published by the Carnegie Commission on Higher Education should be of interest to the physicians of Alabama. Taking a sampling of our graduates from the medical school who graduated in the period, 1950-1959, there were 67.7 per cent of these graduates who, in 1967, were located in the State. This was the fourth highest percentage of graduates remaining in the State of their training in the nation.[2]

One of the surprising gains from the estab-

lishing of postgraduate training at the Medical School was found in the number of non-graduates (of the Alabama Medical School) who were house officers at the University Hospital (1945-1970). These include interns, residents, and fellows. There has been a total of 776 of those receiving training, of which approximately half (388) have remained in Alabama.

It would indeed appear that the medical school is fulfilling its function by furnishing physicians for the care of the health of the people in Alabama. In a larger sense, the success of the University of Alabama School of Medicine is a tribute to the many dedicated physicians, teachers, legislators and concerned Alabamians working over a period of almost a half century who dreamed a dream, then made of it an accomplished reality.

Howard L. Holley, M. D.

1. General Laws of the Legislature of Alabama. Passed at the Session of 1943. Message of Governor Chauncey Sparks to the Alabama Legislature. p. XXVI.

2. Fein, R., and Weber, G. I. Financing Medical Education, McGraw-Hill Book Co., New York, N. Y., 1971.

The M. D. In Politics

Speaking at the recent annual convention of the American Medical Association, President Nixon challenged our profession to assume leadership in four areas of vital interest to our citizens and the health and well-being of our society. These areas were (1) improvement of the nation's health care system, (2) involvement in educating people to the serious dangers of drug abuse, (3) to contribute to the physical, moral and mental health of the country, and (4) become more actively involved in politics at all levels of government.

—President's Page, Arizona Medicine.

All real democracy is an attempt (like that of a jolly hostess) to bring the shy people out.

—G. K. Chesterton.



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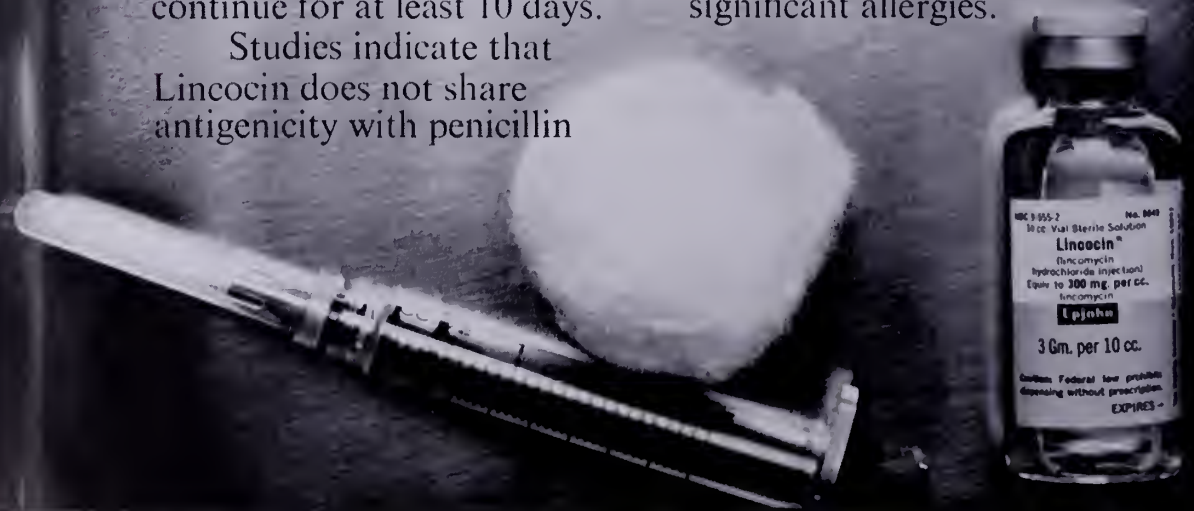
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Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

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500 mg. Capsule	500 mg.
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An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.

Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

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SMA Plans Outstanding Meeting At Miami Beach

Plans have been completed for the 65th annual meeting of the Southern Medical Association at the Fontainebleau Hotel, Miami Beach, announces Dr. Albert C. Esposito, Huntington, West Virginia, president. SMA is the largest regional medical association and the second largest general medical association in the nation, numbering members from thirteen Southern states and the District of Columbia.

The convention opens on Sunday, October 31st, and will continue in session through Thursday, November 4th.

The social events are legendary—beginning Sunday evening, with the president's reception, honoring Dr. Esposito; then Tuesday noon, the "President's Luncheon," again honoring the president, when he will have as his guest speaker, Dr. Merlin K. DuVal, Jr., the new HEW assistant secretary for health and science. Wednesday morning, the Second General Session, with Dr. Esposito presiding, will include a symposium on "National Health Insurance," and will have as guest speakers, Congressman Joel T. Broyhill, of Virginia, one of the primary sponsors of Medicredit and related national health and insurance bills before Congress, and Dr. Carl A. Hoffman, of Huntington, the president-elect of the American Medical Association. This will be the first time that Dr. Hoffman and Dr. Esposito, two West Virginia presidents, will appear together at a national meeting.

On Wednesday noon, the women's auxilliary will have an outstanding "Doctor's Day" program, and Wednesday evening, the association will honor its president, Dr. Esposito, once again, with a dinner dance—featuring the music of Lenny Dawson, with Anita Bryant—and an additional floor show. Thursday morning, the General Session will present a symposium on "Medical Economics," and the business side of medicine, with pension plans, investment plans, office routines, and various factors of importance to the physician and his wife, being discussed in full.

The twenty-one general sections have planned what appears to be the most outstanding scientific program that has been presented in many years, with all the papers geared to the practical side of the practice of medicine in General Practice, and each of the specialty sections. Each section has invited a national prominent guest speaker, as for example, the section of:

DERMATOLOGY—Dr. Robert R. Kierland, Rochester, Minn.

GASTROENTEROLOGY—Dr. Sidney F. Phillips, Rochester, Minn.

GENERAL PRACTICE—Dr. Jonathan O. Cole, Boston, Mass.

NEUROLOGY AND PSYCHIATRY—Dr. Clark H. Millikan, Rochester, Minn.

OBSTETRICS—Dr. Richard W. Stander, Cincinnati, Ohio.

OPHTHALMOLOGY—Dr. Trygve Gundersen, Boston, Mass.

PHYSICAL MEDICINE—Dr. Karl J. Olsen, Akron, Ohio.

SURGERY—Dr. James W. Pate, Memphis, Tenn.

UROLOGY—Dr. Wyland F. Leadbetter, Boston, Mass.

Medical students from each of the thirty-four medical schools in the area of the Southern Medical Association have been invited as guests of the Southern Medical Association, to participate actively in the program. Also, at the meeting, the annual "Distinguish Service Award" and the original "Research Awards" will be presented.

Several medical societies will be meeting conjointly with the association in November, including the "American College of Chest Physicians" Southern Chapter; The Radio-

logical Society of North America; The Southern Gynecological and Obstetrical Society, as well as alumni groups from all the medical schools in the South.

The meeting will conclude Thursday noon, when a post convention tour to Greece and the Greek Islands takes off. The planning for this 65th annual meeting has been extensive, and the physician's preregistration would indicate that an unusually large number of physicians in the South have pre-registered. There is no registration fee, and all physicians and their wives are invited to attend.

Dr. Esposito, a past president of the West Virginia State Medical, the Cabell County Medical Society, and the West Virginia Academy of Ophthalmology, is also currently serving as the Secretary of the American Association of Ophthalmology, as well as a Vice-President of Blue Shield of West Virginia, member of the Executive Committee of Wespac, and the alternate delegate to the AMA from West Virginia. He is also a Fellow and member of numerous national and international medical societies, and was this year the recipient of the "Outstanding Ophthalmologist Award" of the Southern Medical Association—Section of Ophthalmology.

AMA 1975 Convention In Atlantic City

ATLANTIC CITY, N. J.—In the wake of its recent successful convention in Atlantic City, the American Medical Association has voted to hold its annual convention here again in 1975.

The AMA House of Delegates took the action after this year's attendance reached a total of 22,906 persons, topping last year's figure of 20,911 by 1,995. Included in these figures are 8,216 physicians in Atlantic City, compared with the 1970 figure of 8,104.

Highlights of the five-day meeting included an address by President Richard M. Nixon, 23 major scientific sessions, hundreds of lectures, panel discussions and symposia, scientific and industrial exhibits, daily showings of more than 30 new medical motion pictures, demonstrations of diagnostic and treatment techniques and other activities to help physicians keep abreast of the latest developments in health care.

The scientific program and exhibits were centered in the huge Convention Hall.

A Fable Of Our Foibles

Once upon a time, a group of scientists obtained a grant to study the natural history of centipedes. After due statistical consultation, they constructed a miniature fence and, placing the centipede on one side of the fence, they lit a match behind the hapless creature and shouted, "Jump!" Of course, the centipede jumped the fence and the scientists were delighted. So, in true research fashion, they pulled off two legs and repeated the experiment and, of course, the cenetipede jumped.

Carefully noting these results, they continued the experiment until they got down to the last two legs, pulled them off and once again lit the match and shouted, "Jump!" Nothing happened! This called for another statistical analysis. The scientists came up with the inescapable conclusion that if you pull all the legs off a centipede, it becomes hopelessly deaf! In due time the Foot and Rug Administration heard about it and were duly impressed. They sent a note to all other scientists to the effect that under no circumstances should anyone make a loud noise or light a match anywhere near a crippled centipede since this would surely impair its hearing.

—Massachusetts Physician.



The concert was just underway,
When to the conductor's dismay
Cramps and diarrhea,
Did so quickly appear,
The maestro no longer could stay.

Because diarrhea with cramping, nausea, and painful straining can strike at the most inopportune time, it takes a comprehensive agent to treat the total diarrheal syndrome and help get the patient back on the job. That's why so many physicians rely on Donnagel, especially during the fall and winter months when "flu" and viral gastroenteritis usually hit their peak.

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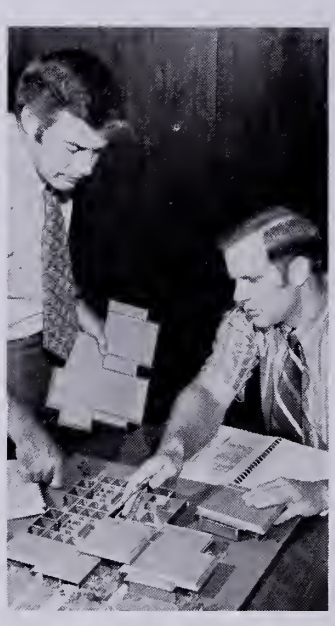
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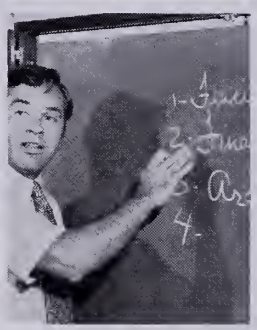
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Published Under the Auspices of the Board of Censors

Volume 41 October, 1971 Number 4

Ludwig's Angina, A Sleeper

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Introduction

The widespread usage of antibiotics has relegated many infectious clinical entities to the state of minor significance, if not to obscurity. Ludwig's Angina is one such entity.

This infection was seen with some infrequence during the pre-antibiotic era, but now its occurrence may be considered as a rarity. The symptoms and signs are totally foreign to a large number of physicians and dentists. It is due to the lack of general familiarity that when this infection does appear with all of its ugly clinical manifestations, its seriousness is rarely initially appreciated.

We have seen only four cases in our respective clinical practices over the past six years. Two of the cases were seen at the Veterans Administration Hospital, Tuskegee, Alabama, within the past 18 months, and the other two were seen by the senior author. One of this author's cases was seen during his surgical residency and the other during his tour of duty in the United States Navy (records not available on this case). It is significant, in each of the four cases, that the severity of this infection was not recognized by the examining physician on admission although all of the stigmata of Ludwig's Angina were present.

What then is so misleading about the early clinical manifestations of this illness as to cause the clinician to misinterpret the onset of a very dreadful entity? First, we must certainly repeat our reference to the fact that it is relatively uncommon, and there will be, of course, a common and acceptable unfamiliarity.

A more cogent reason for the perniciousness of this disorder not being appreciated is its phlegmonous characteristic. Thus, the unwary physician while treating the infection as a simple cellulitis and expectantly awaiting resolution or localization will suddenly find that the illness has insidiously progressed to a life threatening situation. Hence, the appropriate title, "Ludwig's Angina, A Sleeper."

History

Wilhelm Frederick von Ludwig, a German physician, published the first in-depth clinical description relative to this infection in 1836.[1] This study became the basis for all future clinico-pathological references. It should be pointed out that there were other references to the syndrome prior to Ludwig's

paper. These would include such pioneer contributors as Hippocrates, Galen, Caelius, and Aretaeus[2] but none approached Ludwig's detailed documentation of the clinical and pathological aspects of the infection. In that paper, Ludwig compiled with the assistance of a Dr. Hahn a discourse on all the known clinical symptoms of the entity. They discussed them from a pathological and anatomical standpoint, and as a result of these discussions Ludwig made his profound observations relative to the guidelines for the establishment of the diagnosis. Ludwig concluded the paper with a case report of his own experience, which included the treatment regimen of his advocacy. Ludwig's criteria for diagnosing the infection were as follows:

"(1) The slight inflammation of the pharynx which quite disappears after the first few days, and when persistent is more a result of peripheral or sympathetic affection;

(2) The unique, one might say woody, hardness of the connective tissue swelling which cannot be pitted by the finger;

(3) The hard tumor under the tongue with the callous indurated ring about the inner circumference of the jaw;

(4) The uniform progression of the swelling which is observed from the beginning occurs in such fashion that the stony hard edge of the induration is bordered by quite normal tissue;

(5) Finally, the minimal, or more frequently, the absence of involvement of the glands, while swelling invades their investing tissues, or perhaps originates from the same."[1]

Tschiassny[2] in his rather exhaustive study on the role of the molar teeth in the etiology of Ludwig's Angina, and Ashhurst's[3] discussion of Ludwig's Angina in which he reviewed the disease and 18 cases in 1929, cited Ludwig's observations and general conclusions and affirmed that these impressions were not yet disproved. Ashhurst summarized Ludwig's observations as follows:

"Ludwig's Angina is a rapidly spreading gangrenous cellulitis; it originates in the region of the submaxillary gland (i.e. spatum submaxillare or submandibulare); the extension evidently occurs by continuity and not by the lymph channels; it shows no special tendency to form abscesses; there is plainly no involvement of the submaxillary glands and lymph nodes." [3]

Ashhurst went further to show that there were dissenters to Ludwig's conclusions, but none of the proposed contradictions or criticisms did much to dissuade the acceptance of Ludwig's objective study.

Etiology and Pathology

There is sufficient proof in the literature to establish conclusively that the etiology of the infection is usually dental in origin, but trauma to include penetrating wounds, gunshot wounds, and open mandibular fractures has been shown to be an etiological factor.

The infection usually begins in the submaxillary space, and extends to the sublingual and submental spaces. It may extend to the lateral pharyngeal space, carotid space, pretracheal space, and to the cranial fossa or mediastinum, although such extensions are exceedingly rare. The important point to remember is that the fascial spaces of the head and neck are contiguous, and infection may begin in either of these spaces and extend to the other. Tschiassny[2], Ashhurst[3], Thoma and Goldman[4], Shafer et al[5], Shapiro et al[6], and Grodinsky[7] all give excellent reviews of the fascial spaces involved in Ludwig's Angina.

Johnson et al[8] stated that earlier bacteriologic studies were in error in incriminating the streptococci as specific agents. They felt that the infection was characterized by a variety of organisms to include hemolytic and non-hemolytic streptococci, staphylococci, pneumococci, Escherichia coli, and Vincent's organisms. Williams and Guralnick[9] in reviewing 20 cases reported that in 16 of

the cases in which cultures were taken, streptococci were found in every case. Eight cases of the 16 demonstrated Vincent's organisms (fusiform bacilli and spirilla) on smears. Ashhurst[3] reported streptococci as predominating in his 18 cases. He was impressed, however, with the large number of mixed organisms recovered, and reported two cases as having cultures of pure staphlococci.

Case Reports

CASE #1. A 43-year-old male was admitted to the Oral Surgery Section of Queens General Hospital, New York City, New York, August 16, 1963, because of swelling about the face and difficulty breathing and swallowing (duration of symptoms not stated). An infected tooth on the right side of the mandible was present (tooth number not stated). The intern's admission findings were described as follows: "Blood pressure 130/90; pulse 82 beats/minute; temperature 99° (orally). Swelling of the lower portion of the neck and swelling extending up to the parotid region. Tongue protruding from the mouth. Unable to open the mouth and inspect. Swelling tense, not fluctuant." Laboratory findings: White blood count—8,000; Differential count—neutrophiles—68%, bands—2%, lymphocytes—24%, monocytes—4%, eosinophiles—2%; Hematocrit—33 volumes per cent; Hemoglobin—11.2 grams. *Hospital Course:* When the patient arrived on the ward at 1:20 p.m. the day of admission, his temperature was 104.4° (orally). He was placed in an oxygen tent and 1.2 million units of aqueous penicillin and 1.2 million units of procaine penicillin were given intramuscularly and concomittantly 30 million units of penicillin were administered intravenously per day. The intern was informed of the patient having increased difficulty breathing, and he advised the nurse to "keep close observation." Later during the evening the day of admission it became necessary to perform an emergency tracheotomy on the ward.

Despite massive doses of intravenous antibiotics, the patient's condition worsened. He was seen by the otolaryngology consultant on his second hospital day and immediate incision and drainage was advised. On August 18, the patient was taken to the operating room and under inhalation anesthesia by way of the tracheotomy tube incision and drainage was performed. Incisions were made in the submental area and floor of the mouth. Thick pus was drained but the culture report was not recorded. The patient's condition improved rapidly after the incision and drainage (see Figure 1) and he was discharged on the 13th hospital day.

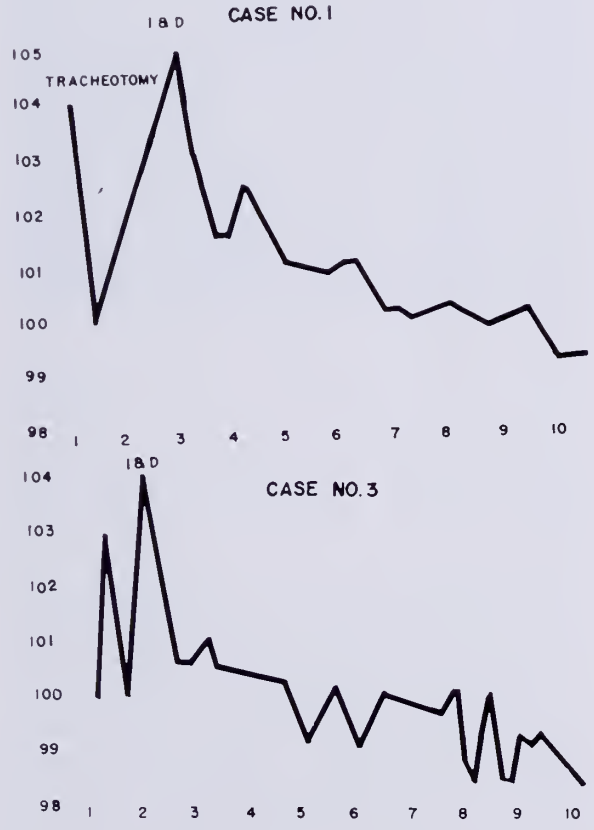


Figure 1

Temperature curves of Cases one and three.

Case #2. The patient, a 51-year-old male, was admitted to the Veterans Administration Hospital, Tuskegee, October 27, 1969, with the complaint of tenderness and swelling of the submental and anterior aspect of the neck. Symptomatology began with a small

area of tender swelling in the submental area three days prior to admission. He denied having had a recent dental extraction, but stated that he had experienced recurrent episodes of inflammation about the mandibular incisors. On admission the temperature was 102.2° (orally), pulse 60 beats/minute, blood pressure 170/100. There was generalized swelling about the submental area, extending laterally and posteriorly to the angles of both mandibles and inferiorly to the supra-sternal notch. One of the examiners described the patient as exhibiting "severe pain under the chin and neck. Unable to open his mouth. Marked swelling and tenderness. Teeth are loose. Floor of the mouth is swollen and tender". There was difficulty swallowing, but no respiratory distress. Laboratory findings: White blood count—9,600; Differential count—neutrophiles—88%, bands—2%, lymphocytes—8%, monocytes—2%; Hematocrit—43 volumes per cent; Hemoglobin—12.9 grams. *Hospital Course:* The patient was seen the next day by the authors. The induration and swelling about the submental area and upper neck had not changed despite intravenous penicillin and chloramphenicol and saline soaks to the neck. He had marked trismus and difficulty handling his secretions, but there was no evidence of respiratory embarrassment.

Immediate incision and drainage under general anesthesia was performed through an incision two centimeters below the mandible and over the right submaxillary space. Ten c.c. of brownish purulent fluid was obtained. The culture report was Proteus species. The post-operative course was entirely uneventful.

CASE ♯3. A 45-year-old male was admitted to the Veterans Administration Hospital, Tuskegee, November 1, 1970, with the complaints of pain in the neck, difficulty swallowing, and swelling about the face and neck for three days duration. Two right mandibular molar teeth had been extracted the day prior to the onset of symptoms. He had no difficulty breathing and could swallow only fluids on the day of admission. The temperature on admission was 100.8° (orally), pulse 80 beats/minute, blood pressure 130/90. Initial examination was described as showing a patient with erythema and swelling of the face and neck. One of the examiners made the following note: "developing acute cellulitis involving submental and submaxillary spaces. Sublingual space may also be involved. Patient reports difficulty in swallowing and tenderness in the laryngeal region. No respiratory difficulty at this time. Origin in right mandibular molar region, but now it is bilateral." Another examiner described "firm induration, but no fluctuation." The patient was unable to protrude the tongue, and the floor of the mouth was swollen. Laboratory findings: White blood count—12,190; Differential count—neutrophiles—80%, lymphocytes—20%; Hematocrit—45 volumes per cent; Hemoglobin —14.3 grams. *Hospital Course:* When the patient was seen by the authors the next day, the swelling had apparently increased despite large doses of penicillin intramuscularly. He could hardly talk. Trismus was severe. He had no difficulty breathing, but was unable to effectively cough and expectorate his secretions. He was placed on massive doses of intravenous penicillin (30 million units per day), warm saline soaks continuously to the face and neck, and immediately scheduled for surgery. General anesthesia was employed. Drainage was effected through a transverse submental incision measuring about six centimeters in length. Through this incision, ready access was gained to the three involved spaces (submental, sublingual and right submaxillary). No pus was observed, but a very small amount of necrotic tissue was obtained. Culture of the drainage and necrotic tissue was reported as showing no growth. Two penrose drains were placed in the depth of the right submaxillary space. There was no immediate relief of pain as one would expect following the drainage of an abscess, but the patient did show marked improvement in



Figure 2

First Post-Operative Day.



Figure 3.

Normal appearance of patient (12 weeks post-operative).

the next 24 hours. The matter of tracheotomy was discussed. It was elected not to perform a tracheotomy in view of the absence of respiratory difficulty. The patient was placed in the Intensive Care Unit for the first 24 hours post-operatively to permit concerted observation. He had a rapid fall in his temperature post-operatively (see Figure 1), and the swelling and induration gradually subsided. He was discharged improved on the 8th post-operative day, November 10, 1970 (see Figures 2 and 3).

These three cases manifested all of the salient features of the inflammatory process. Cases 1 and 3 are classical cases of Ludwig's Angina. Case 2 was not as dramatic as Cases 1 and 3, but we felt that the patient's illness fulfilled all the criteria of Ludwig's Angina.

Management

When such a patient first presents, he should be immediately placed in an area where he can be constantly observed. Vital signs should be monitored, and restlessness should be evaluated thoroughly before prescribing sedatives or an analgesic, as restlessness may indicate hypoxia. Increasing difficulty handling secretions or any difficulty with breathing should be viewed with the utmost urgency and strong consideration given to performing a tracheotomy. Intravenous antibiotics should be initiated in maximum dosages (30 million units of penicillin per day, or 8 to 10 grams of sodium cephalothin per day). A tracheotomy tray should be at the bedside until the crisis is over. Continuous warm saline soaks are provided and immediate surgery is planned. In the majority of cases one will be disappointed if he decides to wait for fluctuation.

We prefer a transverse submental incision through which we can reach all of the in-

fected spaces.[10] There is no objection whatsoever to placing the incision over the involved submaxillary space or extending the submental incision to include the submaxillary space if one thinks it will facilitate drainage. It must be kept in mind, however, that the cervico-mandibular branch of the facial nerve overlies the submaxillary space and may be injured. The facial artery and facial vein also are located in this region. The incision in the submaxillary region should not include the platysma muscle to avoid the complication of severing these structures. Dissection carried deeper than this muscle should be by a blunt Kelly clamp.

One should not be distressed by the absence of pus, although he has adequately opened all involved spaces. It must be abundantly clear that one of the outstanding features of this entity is that it is a phlegmon, and characteristically does not localize.

In only one of the four cases seen by us was a tracheotomy performed (Case ♯1), and this was done prior to the incision and drainage. It was necessary to perform an emergency tracheotomy on the ward under less than optimal conditions.

We have been impressed with the effectiveness of early incision and drainage in the three cases in which it was performed. All demonstrated arrest of the progression of the disease within 24 hours. It is conjectural whether any of these patients would have required tracheotomy if immediate incision and drainage had not been performed.

Johnson et al[8] wrote in favor of establishing an airway and treating the infection with antibiotics. Case ♯1 demonstrates that this approach is not always adequate.

We do not deny that preservation of the airway takes priority. We simply feel that immediate incision and drainage may obviate airway problems in most cases. Tracheotomy and concommitant drainage of the involved spaces are preferred should the patient present with airway difficulty.

The choice of anesthesia is dependent upon the availability of an anesthesiologist that can perform nasal-tracheal intubation with the utmost care and completely devoid of trauma to all areas of induration as well as to the glottic structures. In the absence of such anesthetic acumen and skill, local anesthesia, supported by systemic sedatives and analgesics is indicated.

"The opinions expressed in this paper are those of the authors, and do in no way represent those of the Veterans Administration."

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Id, Ego and Superego Revisited

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Sigmund Freud advised his psychoanalytic colleagues to refrain from glancing over their shoulders lest they discover a biologist behind them with a syringe. Freud thought that future physiologic and psychiatric studies might alter the approach to his psychoanalytic investigations and theory.

With the rather recent advent of the neurosciences, psychiatry and its brother psychology have begun to undergo major changes in their theoretical and clinical concepts. Among these permutations is the Wolpian concept of reciprocal inhibition with those interesting results gleaned from recent studies involving operant conditioning. The invention and applications from electron microscopy, plus the necessary expertise for studying electric potentials in isolated neurons, with other highly involved instrumentations and chemical studies involving the nervous system, have breathed new life into the erstwhile rather dormant field of psychiatry.

Recent biochemical studies involving the cortical and sub-cortical brain areas, plus advances in our learning concepts, have enhanced our current knowledge markedly about behavior. Consequently our former concepts of cerebration have undergone drastic revisions, as have those comprehensions which involve mind, soul, and the psyche. Some ideologies have suffered because of their inability to submit properly to scientific questionings through research. These rather archaic nomenclatures have not lent themselves to proper and facile comprehension by colleagues in the basic sciences and with those in the neurosciences. Metaphysical constructs have not been translated into scientific terminology because of semantic obstructions.

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Freudian terminology has become commonplace in everyday life. Some of this is used by the general public quite freely. Freudian theory has permeated psychological, psychiatric, sociologic and anthropologic fields to a marked degree. However, this philosophical theorizing might be verified with biological studies and experimentation, since many of these theoretical concepts could not be defined readily, nor had they definite correlates within the various biologic sciences. Some critics of Freudian theory claim they were too general since no one item could be readily explained, much less proven scientifically. In other words, Freudian hypotheses include just about everything psychologic, yet nothing has been proven for the non-Freudianists.

Those who questioned the Freudian theory have been ignored or dismissed by this master, for he did not tolerate the questioning his work, according to Neel[1] 1969. This defensive action on the part of the proponents of Freudian theory has been experienced by this author who was attacked by some analysts who insisted that my exceptions to Freudianism were caused by portions of the theory which were disturbing to me.

Consequently, such reactions from psychoanalysts and others who have accepted Freudianism as the gospel, leave little chance for scientific discussions with others who do not accept the Freudian theory. This state of affairs leads me to believe that Freudian followers have formed a religious cult wherein Freud has become the messiah, who passed his theoretical concepts to the present high priests for safe keeping of the Freudian bible and its teachings. Such cults are widespread over the width and breadth of this and foreign lands, particularly within some departments of psychiatry and in sundry psychoanalytic institutes.

At the outset of each quarter at the Uni-

versity, I encounter students who have embraced Freudianism with a passion, probably because of other courses in psychology and from their readings. To these and the others who support such a philosophy, I suggest they study Percival Bailey's book (1965)[2] which deflates such concepts fully and with great expertise.

As Bailey pointed out, attempts have been made to employ analogy from various sciences to improve psychoanalytic theory, which operates by its own rules. However, proof with such concepts, which emanates from Freudian theory, remains lacking, because the philosophy has never been based upon the experimental method.

Although Freud desired to base his concepts on physiologic teachings, he gave up this approach, although physiologic findings were available to him from such authorities as Wundt, Fechner, Muller, Pavlov, Watson and others who had published their important scientific findings during Freud's lifetime.

Purposes of this communication

An attempt will be made to reduce Freudian concepts into more readily understandable biologic findings with the hope that this approach might contribute to our discernment of what Freud wished to impart. In other words, we shall try to reduce and explain some Freudian teachings with biological terms so that a better understanding of Freud's philosophic theory and nomenclature can be transposed into scientific terminology.

We shall then approach some of these Freudian concepts in order to explain and to correlate them with scientific procedures and therapeutic practices which have been and are presently employed by non-Freudian scientific investigators. To accomplish this, it will be necessary to use the immunologic concepts of behavior which have been discussed in a series of articles by this author[3-10]. This biologic approach to behavior has been used in an attempt to correlate psychologic and psychiatric concepts with accepted biologic principles in which neural sensitivity and hypersensitivity apparently play major roles for determining one's behavior.

These concepts have been used with some success by the author for his classes in the various psychologic courses in order that his students might obtain a fuller comprehension from such information. It is hoped that many confreres in these fields will make their own impressions known after they have become acquainted with this material and our approach.

Resumé of some Freudian concepts

Freudian theory is involved, to a great extent, with personality development. Such Freudian terms as the Ego, Id and Superego, have become almost universal and used to such an extent that some individuals regard them as being actually incorporated within the body, as Descartes considered the pineal gland as the source for the soul. I doubt if Freud ever meant for his terms to be regarded as portions of one's anatomy. He employed his terminology as explanations for forms of normal and abnormal behavior. Even today, Freudian mechanisms are used for the formulation of personality theories[1].

Freud's main principle was to show that an individual preferred pleasurable experiences with the avoidance of those which proved painful. This briefly constitutes his pleasure principle which became fused with a reality principle in which each individual gained gratification by the process which had to do with self control through his Ego.

Freud thought of the Id as the origin of desires which became involved with the gaining of pleasurable experiences. The Ego had to do with reality, while the Supergo became involved with moral values which originated from parental guidance. Conflicts arose because of various environmental pressures which produced defense mechanisms for what we now regard as frustrations. These many forces, which finally produced each individ-

ual's particular personality, were the results from such experinces with environmental sources. According to Freudian theory, these environmental forces produced effects within each individual which he or she was unaware. Hence, these were unconscious changes which took place within the individual.

Examining these Freudian personality principles more minutely, the Id originated from various crude biologic forces which stimulated an individual. Freud considered the Ego as the part of one's personality which sought pleasurable outlets because of the unbridled stimulations which arose from the Id. The Ego had to do with one's self-control, which in turn, became under the influence of the Superego which formed the conscience of the individual. The Ego is the conscious control of the raw Id forces which play upon it[12]. So the Ego redirects these basic urges, such as with aggression and sex which can be quite asocial. Those parental and societal influences, resulting from learning, form the so-called Superego, which Krech and Crutchfield consider as the person's moral plane and conscience. The Superego and those pressures produced by the Id constantly play upon the Ego, thereby producing, at times, vitriolic behavior, but motivation can be considered as having been produced by the Id. Strife produced by conflicts between the Id, Ego and Superego can produce anxiety. In non-Freudian terminology, such can be caused by frustrations, a term never employed by Freud so far as I know.

Biologic Implications

The Freudian approach to personality study seems unwieldy, since Freud manufactured a separate non-biologic terminology which is quite foreign to the basic sciences. If it were possible to explain Freudian philosophy in readily understood and acceptable scientific terms, considerable improvement might result by making Freudian theory more understandable and acceptable to non-Freudian scientists. Furthermore such an explanation might demonstrate Freud's basic desire to follow biologic logic, which does not appear to be the case presently with Freudian and psychoanalytic discussions which involve the psyche (the intellect).

The Id, according to the Freudian doctrine, is the primitive, blind and driving apparatus which produces the libido, the energy employed by the psyche. The Ego and the Superego evolve from this primitive force, drive or basic instincts which have been inherited, such as hunger, thirst and the sexual drive, all of which demand some gratification in the formulation of the individual's personality.

To myself at least, this so-called libido is the result of ecospheral stimuli which bombard the individual from its conception until death. These stimuli reach the brain via afferent connections through the 5 senses (hearing, seeing, feeling, tasting and smelling). These stimuli encode the various cerebral areas which perceive these sensations, and learning begins to take place. The results from such learning episodes are stored in the many and varied receptive and association areas of the brain where such encoding has resulted by means of electrochemiconeural processes. Later associated incoming stimuli can produce recall (remembering). But at times, such does not happen spontaneously upon one's volition, but can return later as most of us have experienced.

The Papez-MacLean circuitry to and from the thalamic areas and to the pituitary gland (master gland), stimulates that organ which sets some rather complicated endocrine physiology into motion. This set of physiologic reactions, which result primarily from perception in the cortical receptive centers, and which finally produce hunger, thirst, and the sexual drive, are centered in the subthalamic nuclei and the reticuloform bodies where affect and the basic drives are recognized by the individual. Perhaps we have now described the basic phy-

siologic characteristics of the Freudian Id through this biologic approach.

The Ego has to do with reality, since it is presumed to control the blind forces originating within the Id. So the Ego redirects these blind Id impulses so that these are rechanneled because of previous learning, reasoning and other mechanisms which have to do with cerebration so that the individual is finally able to achieve these basic needs through realistic achievement.

This type of neural activity appears to be associated intimately with the functions of the cerebral cortex which are concerned mainly with cerebration, such as learning, memory recall, problem solving, inventing and thinking.

Freudian theory stresses the function of the Superego as being concerned with checking those basic impulses, such as sex motivation and aggression. It functions supposedly as a substitute for those forces derived from societal and parental influences. As Krech and Crutchfield have written, it becomes the child's moral sense and conscience. If well developed it functions to control some of the more asocial drives which originate from the Id.

Through these presumed functions of the Superego, Freud has introduced those effects upon the individual from one's ecosystem. Such ecosystemal influences certainly include previous stimuli from parents, teachers, biting dogs, climactic stimuli and other varied effects from one's environment which continually stimulate or hypersensitize one's afferent receptive cortical centers. Contrary to the Freudian view, aggression may result from frustrations. If so, aggression cannot be considered to be a basic impulse. Rather, aggression or regression result from frustratory mechanisms, which are a part of the Darwinian theory (See ref. no. 3). So we can show that the Superego is the result from ecosystemal stimuli which have either sensitized or hypersensitized the receptive cortical centers of the individual. This is a major function and is connected with the learning processes through perceptive means.

This is then a biologic explanation for the Freudian concepts of the Id, Ego and Superego. However, the usual commonplace concept of the Ego should be discussed. Perhaps it may suffice to consider the status of one's Ego as being related intimately with one's self-esteem. So Ego can be defined as the current status of one's self-esteem. It can be either inflated or depressed, depending upon the sum total of one's struggles with his environment. If he wins most of these conflicts, his self-esteem may be high; if he met many defeats, his self-esteem may be at a low ebb. In summary, the status of his Ego or self-esteem will be dependent upon how this individual fared during his many battles with his environment up to the present.

Summary

Some Freudian terms, as the Id, Ego and Superego, are reexamined as to their possible transformations into physiologic terminology. It is hoped these biologic applications covering these Freudian terms will possibly explain such metaphysical terms adequately so that their proper relationships to biology can be established.

A friendly Romanesque pinch on the rump is due my wife, Louise, who, with nary a whimper, types my manuscripts.

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(Continued on Page 281)



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Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.

Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.

Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.

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(Continued from Page 274)

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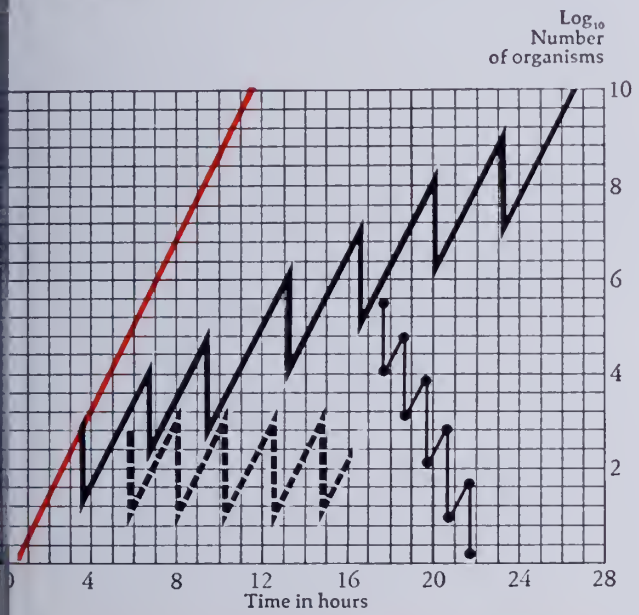
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Voiding frequency and bacterial build-up[1]

Graph shows the theoretical effect of various voiding frequencies on bacterial proliferation in the urine.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

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Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

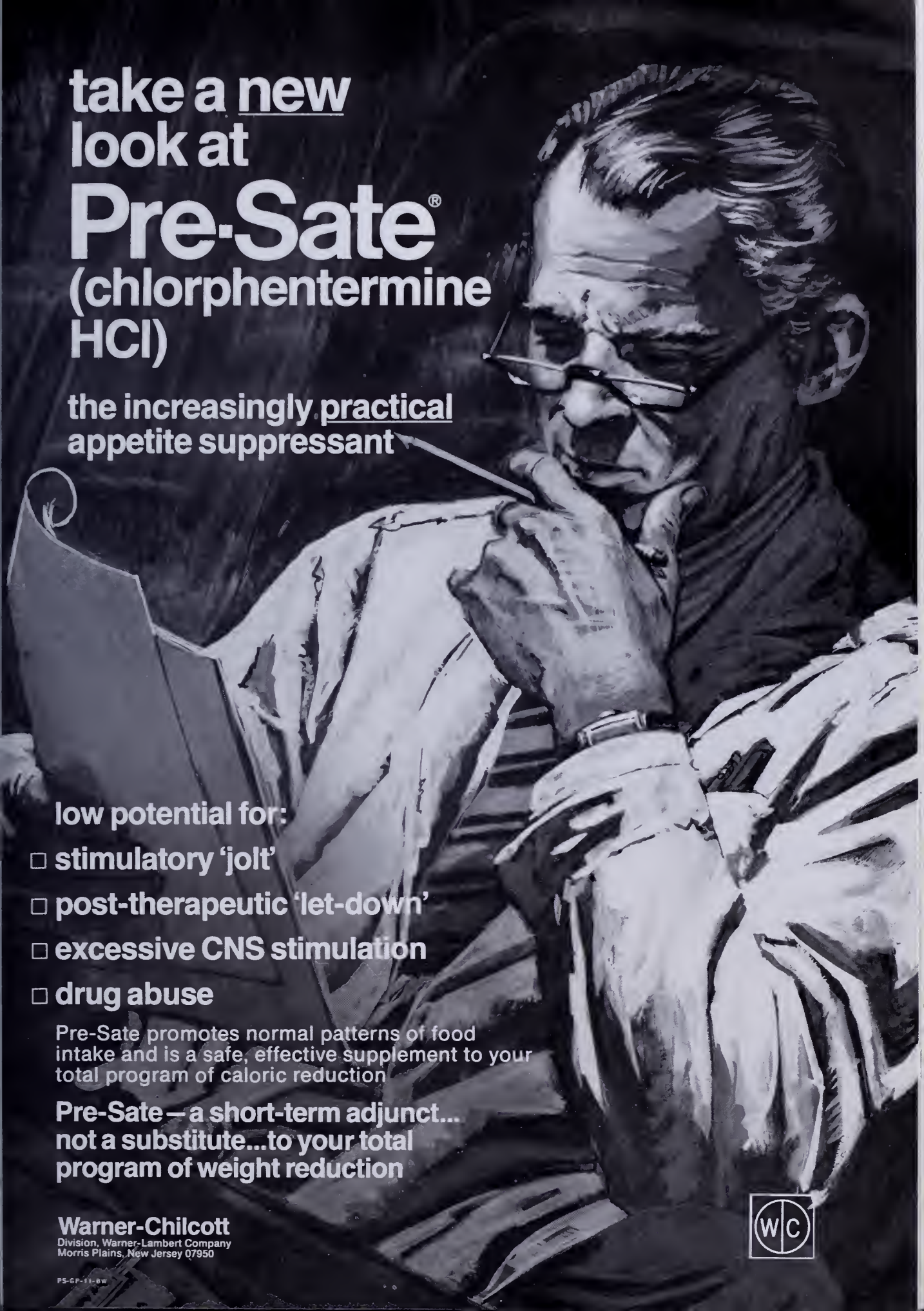
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

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The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

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Alabamian One Of Four To Be Honored By ACCP

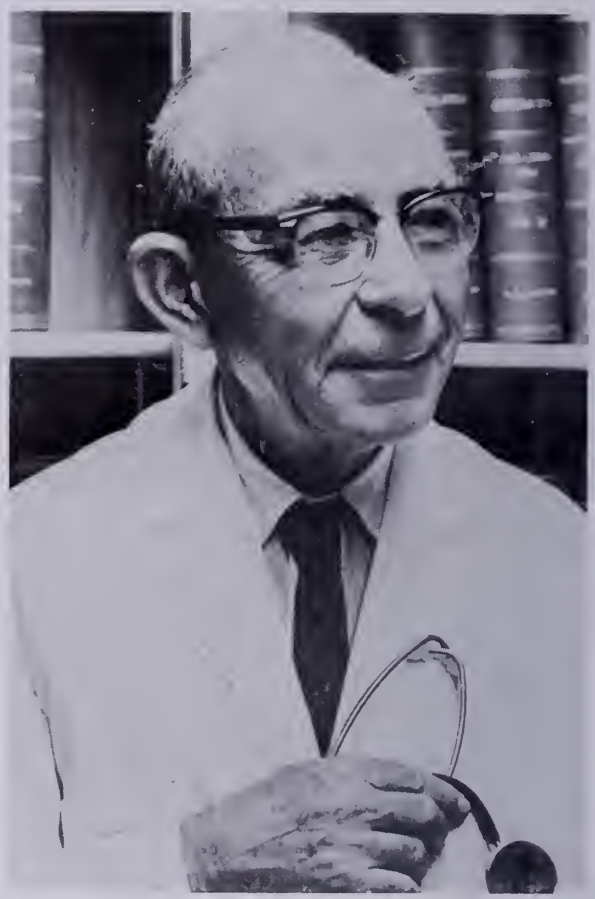
An Alabamian is one of four distinguished medical teachers and researchers being honored this month for their contributions to the advancement of knowledge of the cardiovascular and respiratory systems and diseases affecting them.

He is Tinsley R. Harrison, M. D., Birmingham, recently retired after a distinguished career as a teacher in cardiology and internal medicine.

Conferring on him the award of College Medalist is the American College of Chest Physicians, an 8,500-member national medical society whose members are physicians and surgeons specializing in these two fields of medicine. The awards will be presented at the College's Third Fall Scientific Assembly (37th annual meeting) at the Sheraton Hotel, Philadelphia, October 24-28, by Arthur C. Beall, M. D., Houston, Texas, Chairman of the ACCP Board of Regents.

Dr. Harrison and the three others being honored will give special lectures during the scientific assembly.

The other three are: Averill A. Liebow, M. D., La Jolla, California, Professor and Chairman of the Department of Pathology, University of California, noted for his work in lung cancer pathology and cardiopulmonary research, Honorary Fellow; Hermann Rahn, Ph. D., Buffalo, New York, Chairman of the Department of Physiology, State University of New York, an authority in respiration physiology, a consultant for the NASA Man-in-Space program, The Louis Mark Memorial Lecture; and Robert E. Forster, M. D., Philadelphia, Chairman of the Department of Physiology at the University of Pennsylvania School of Medicine, an authority in pulmonary physiology known for his contributions to research projects of the National Academy of Sciences and the National Research Council, Distinguished Lecturer in Physiology.



TINSLEY R. HARRISON, M. D.

Dr. Harrison, 71, whose reputation lies in the teaching of cardiology, and internal medicine, retired in 1970 as Professor of Medicine at the Medical College of Alabama. He had served there in previous years as chairman of the Department of Medicine and Division Director of Cardiology. He is also Distinguished Emeritus Professor of Medicine at the University of Alabama School of Medicine. His teaching career started in 1925 when he became an instructor in medicine at Vanderbilt University School of Medicine. He became Professor of Medicine at Bowman Gray School of Medicine in 1941 and Dean of the Faculty and Chairman of the Department of Medicine at Southwestern Medical School in 1944. He also served as Physician-in-Chief at the Parkland Hospital in Dallas, Texas.

A native of Talladega, Alabama, Dr. Harrison received his medical degree at Johns Hopkins University School of Medicine in

(Continued on Page 289)

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(Continued from Page 286)

1922. He interned at Peter Bent Brigham Hospital in Boston and divided his residency between that hospital, Johns Hopkins Hospital and Vanderbilt University Hospital. He has been commended by the U. S. Senate for his contributions to science and was recipient of the American Heart Association's Gold Heart Award in 1961.

Once Upon A Time, Top Secret

"The Pentagon Papers," which stirred such a storm and brought federal court action against The New York Times and other newspapers, have now been made available in a paperback Bantam Book. In 672 pages plus 62 pages of photographs, the complete and unabridged series in book form is priced at $2.25. The work carries the bylines of 17 members of the New York Times staff.

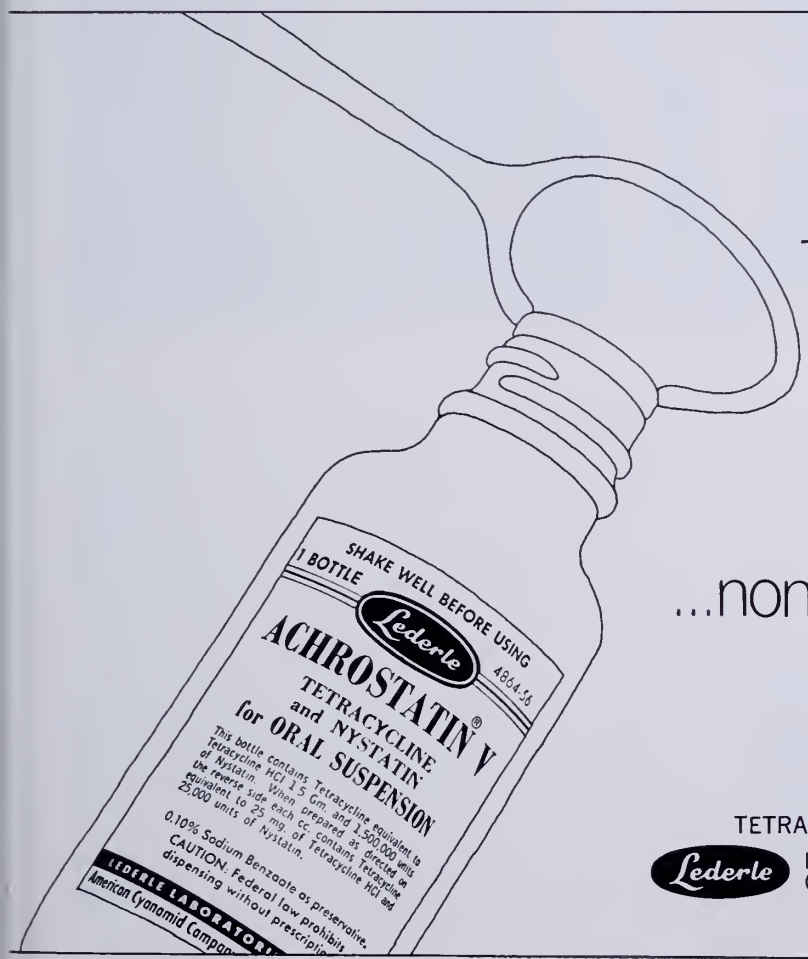
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Fathers and Sons in Medicine

Three Of Six In Russell Family Still Practice Medicine



R. O. RUSSELL, JR., M. D., R. O. RUSSELL, SR., M. D., R. T. RUSSELL, M. D.

Six doctors in four generations are the subjects of this month's edition of Fathers-and-Sons in Medicine.

Richard Olney Russell, M. D., Birmingham, who was announced two months ago as one of MASA's 50-Year Club members for 1972, is in the accompanying picture with his two doctor sons. And it is unfortunate that there are no surviving likenesses of Dr. Russell's father, his father's father, and his mother's father, all doctors.

Of the living trio, the senior Russell was born in Somerville, Alabama, December 1, 1897, the son of Dr. and Mrs. Thomas Jackson Russell, the grandson of Drs. Christopher Hugo Russell and D. M. Winton. There can be little doubt about where Dr. Thomas Jackson Russell got his given names when it is remembered that he was born in 1871, just six years after the war in which Stonewall Jackson died.

Dr. Richard O. Russell, Sr., went through Morgan School in Fayetteville, Tennessee, before returning to Florence, Alabama, for his baccalaureate work at State Normal. He took pre-med at Auburn, 1916-18, going on to Tulane from which he received his M. D. degree in 1922.

Dr. Russell interned and served as house physician at Charity Hospital, New Orleans, 1922-26, before entering the practice of internal medicine in Birmingham. Four years later married Miss Louise Taylor of Birmingham and three children were born to them. The two sons followed their father, grandfather and two great-grandfathers into medicine, while the daughter, Rosemary, is married to James E. Gibson, Ph. D., a professor at the University of Alabama at Huntsville.

Richard Olney Russell, Jr., was born in Birmingham July 9, 1932; went from the Birmingham public school system to Vanderbilt for his baccalaureate, a Phi Beta Kappa, an O. D. K., changing from Vanderbilt te Tennessee for his M. D. degree, which he obtained in 1956. His internship and residency were at Peter Bent Brigham, Boston, in the midst of which came a two-year army duty, where he held the rank of captain. He has had a fellowship in Cardiology at UAB Medical College and one in Biophysics and Bioengineering, University of Utah, Salt Lake City. For the last decade he has been teaching at UAB Medical College, as instructor, associate professor and currently co-director, Myocardial Infarction Research Unit. This junior Dr. Russell is married to the former Phyllis Hutchinson and there are three children: Scott Richard, 4; Katherine Hutchinson, 3; and Meredith Cooper Russell, 1.

The younger of the two sons in medicine is Robert Taylor Russell, born April 21, 1936. He went to Tulane fer his M. D. degree, interned at Charity, New Orleans, and had his residency at the University of Alabama Medical Center, the last of his four years as Chief Resident. His specialty is Urology.

The youngest of the current Russells in medicine is married to the former Nan Pressley of Aberdeen, Mississippi. Like his older brother, he is currently teaching his specialty at the UAB Medical College. And like his father, gardening is his No. 1 hobby, though unlike his father's second cheice, writing poetry, Dr. Bob Russell prefers tennis. Yardwork (in a way related to gardening) is an incidental hobby with Dr. Dick, Jr. Actually he much prefers reading!

Not only was the father of Dr. R. O. Russell, Sr. (Dr. Thomas Jackson Russell) in medicine, but so were his two grandfathers—Dr. Christopher Hugo Russell and Dr. D. M. Winton. All were Alabama physicians but, unhappily, biographical informatien about them is at best sketchy. The town of Winton, in Morgan County, was named for his maternal grandfather.

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Warnings: May impair alertness; operation of automobiles and other activities made hazardous by diminished alertness should be avoided. If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed; erythema multiforme, including Stevens-Johnson syndrome (with a fatal case), has been associated with thiabendazole therapy in children. Safe use in pregnancy or lactation has not been established.

Precautions: Since thiabendazole is metabolized in the liver and excreted by the kidneys, hepatic and renal function should be carefully monitored in patients with dysfunction of these organs.

Adverse Reactions: Frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, collapse, abnormal sensation in eyes, blurring of vision, hyperirritability, numbness, hyperglycemia, xanthopsia, enuresis, perianal rash, cholestasis and parenchymal liver damage, hypotension, and a transitory rise in cephalin flocculation and SGOT. Hypersensitivity reactions include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy. Appearance of live Ascaris in the mouth and nose has been reported on rare occasions.

Some patients may excrete a metabolite which imparts an odor to urine, much like that which occurs after ingestion of asparagus. Crystalluria without hematuria has been reported on occasion, but has promptly subsided with discontinuation of therapy; while the etiologic role of thiabendazole has not been established, the possibility of crystalluria should be kept in mind. Transient leukopenia has been reported in a few patients, but the cause and effect relationship in these cases has not been established.

NOTE: In children weighing less than 30 pounds, clinical experience with thiabendazole for treatment of intestinal parasitosis has been limited. Thus, the benefits of this therapy should be weighed against the possibility of adverse reactions.

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Classmates At Emory In 1972's 50-Year Club

Two more Alabama doctors who have reached that distinguished time in life to qualify for induction into MASA's exclusive 50-Year Club were born in the same year, 1897.

This is the year made fameus by the inauguration of William McKinley as 25th president of the United States, by the writing of the song-hit, "On the Banks of the Wabash," and by the defeat of the popular prize-fighter "Gentleman Jim" Corbett by "Bob" Fitzsimmons with a blow to the "Solar plexus."

Harry Sam Rowe was born in Elba, Alabama, on Tuesday, June 22, 1897, and teok his academic and pre-med work at the University of Alabama. Ben Goldstein was born in Birmingham five months later, on Monday, November 1, 1897, attending the public schools of Birmingham, earning his baccalaureate from the University in 1918.



DR. ROWE



DR. GOLDSTEIN

Dr. Rowe interned at the old City Hospital in Mobile, and met and married Helen Curry, whose grandfather settled Mt. Vernon, Alabama, where the Rewes have made their home for 47 years. They have four children, three sons, none of them in medicine, and a daughter, Mrs. Neal (Mary Elizabeth Rowe) Dollar of Houston, Texas.

Dr. Goldstein interned at New York's Bellevue Hospital, and he practiced obstetrics and gynecology in his native Birmingham from then to his retirement in 1965, fer many years on the staff of St. Vincent's Hospital. A bachelor, he makes his home with his sister, Mrs. Louis G. Kopton. Some years ago Dr. Goldstein abandoned golf, and today fishing is his only hobby. It is also Dr. Rowe's.

Drs. Rowe and Goldstein were classmates at Emory, Atlanta, earning their M. D. degrees from that school in 1922.

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—Digest of Official AMA Actions, 1846-1958.



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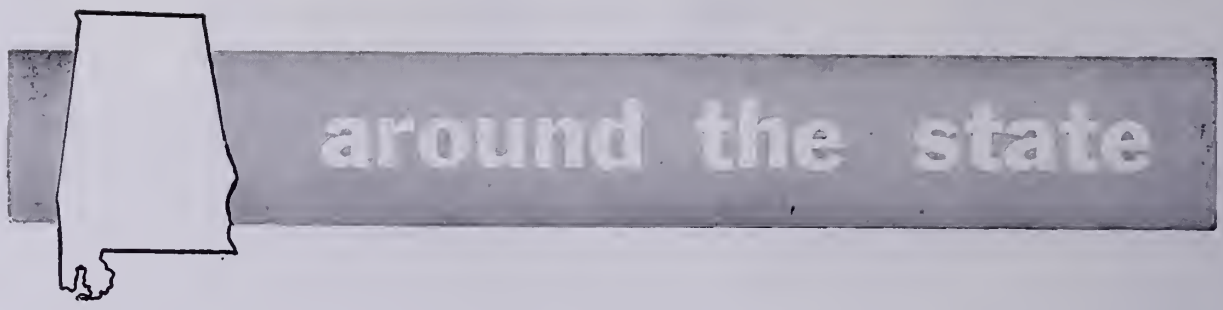
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NEW MEMBERS

Blount County

Stevens, Johnnie Wayne, b 37, mc University of Alabama '70, recip. NBME '71, 103 4th Street North, Oneonta, Alabama 35121. GP.

Crenshaw County

Neshat, Amir Ali, b 34, mc Esfahan, Iran '60, recip. Maryland '71, P. O. Box 58, Luverne, Alabama 36049. S.

Dallas County

Anderson, Robert Edward, b 38, mc Alabama '64, sb 65, 509 Parkman Avenue, Selma, Alabama 36701. S.

Jefferson County

Beck, Jere LeMay, b 43, mc Alabama '69, sb '70, Lloyd Noland Hospital, Fairfield, Alabama 35064. ObG. (Resident)

Ensor, Herman Calvin, b 31, mc University of Alabama '64, sb 65, 1529 North 25th Street, Birmingham, Alabama 35234. ObG.

Finney, James Owen, Jr., b 38, mc Vanderbilt '65, recip. NBME '66, Department of Medicine, Keesler Medical Center, Keesler Air Force Base, Mississippi 39534. I.

Glasser, Lewis, b 35, mc Cornell U. '60, recip. Georgia '71, University Hospital, Clinical Pathology, 1919 South 7th Avenue, Birmingham, Alabama 35233. CP.

Goldstein, Richard Paul, b 38, mc University of Alabama '64, sb 65, 1033 South 22nd Street, Birmingham, Alabama 35205. ObG.

Graves, David Barnett, b 41, mc University of Alabama '66, recip. NBME '68, 619 19th Street South, Birmingham, Alabama 35233. R. (Resident)

Hunter, John Willis, Jr., b 12, mc Washington U. '38, sb 38, Lloyd Noland Hospital, Fairfield, Alabama 35064. GP.

Kouchoukos, Nicholas Thomas, b 36, mc Washington University '61, recip. Missouri '67, 1919 7th Avenue South. Birmingham, Alabama 35233. S-ThS.

Lindsey, James Douglas, b 38, mc University of Alabama '64, sb '65, 801 Princeton Avenue, S. W., Birmingham, Alabama 35211. S.

Lineberry, Dice Kyle, b 39, mc University of Alabama '64, sb 65, 1529 North 25th Street, Birmingham, Alabama 35234. I.

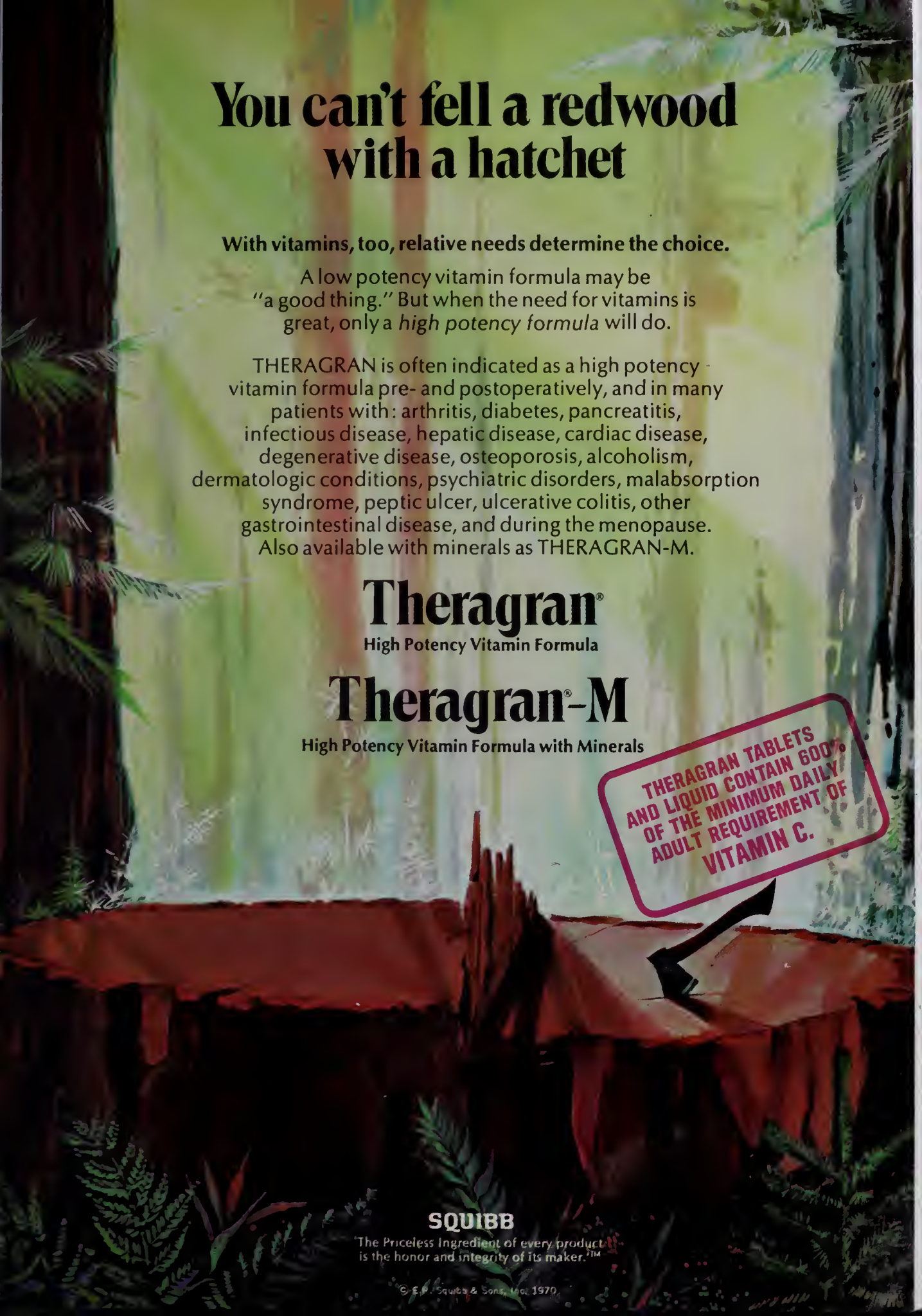
Martin, Robert Faber, b 08, mc University of Virginia '32, recip. Virginia '67, Thuss Clinic, 2124 4th Avenue South, Birmingham, Alabama 35233. S.

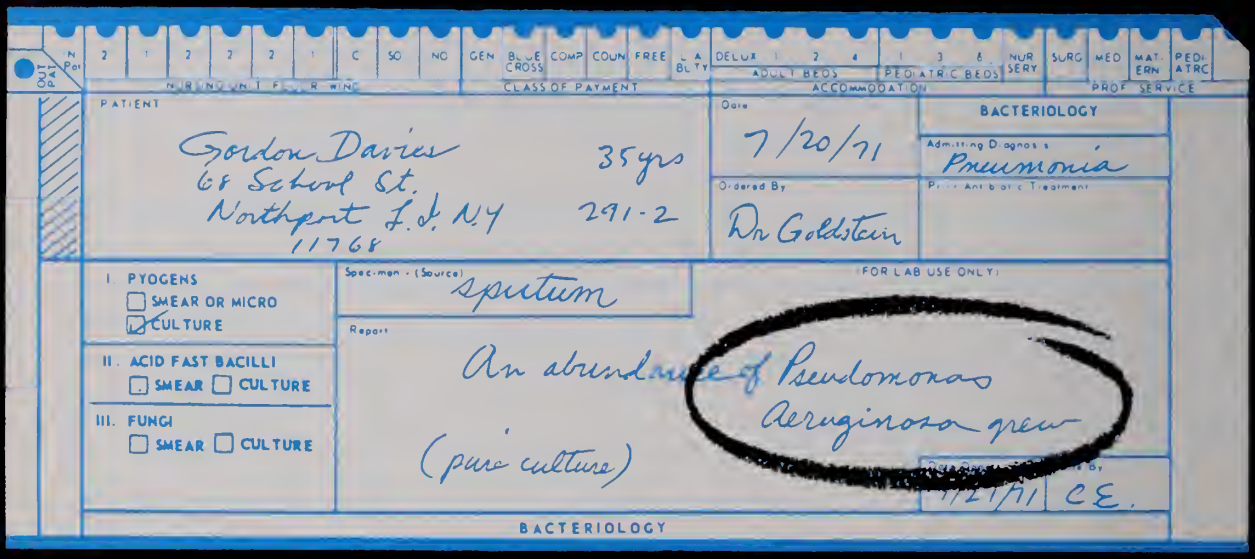
Miller, John Melville, III, b 31, mc University of Alabama '56, sb 57, 1919 7th Avenue South, Birmingham, Alabama 35233. Phys. Med. & Rehab.

Moore, William Joseph, b 38, mc University of Kentucky '65, recip. Kentucky '70, Room 142 Lyons Harrison Res. Bldg., University of Alabama Medical Center, Birmingham, Alabama 35233. D. (Resident)

Morros, Constantine Demetrios, b 40, mc Alabama '65, sb 66, Suite 216, Professional Building, 800 Montclair Road, Birmingham, Alabama 35213. R.

(Continued on Page 301)


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Although PYOPEN (disodium carbenicillin) is indicated primarily in Gram-negative infections, its activity against Gram-positive organisms should be kept in mind when both Gram-positive and Gram-negative organisms are isolated (see Actions). **Note:** During therapy, sensitivity testing should be repeated frequently to detect the possible emergence of resistant organisms. **Actions:** Organisms found to be susceptible *in vitro* include: Gram-Negative Organisms-*Ps. aeruginosa*, *Proteus mirabilis*, *Pr. morganii*, *Pr. rettgeri*, *Pr. vulgaris*, *E. coli*, *Enterobacter* species, *Salmonella* species, *Hemophilus influenzae*, and *Neisseria* species. Gram-Positive Organisms-*Staphylococcus aureus* (nonpenicillinase-producing), *Staph. albus*, *Diplococcus pneumoniae*, Beta-hemolytic streptococci, and *Streptococcus faecalis*. Some newly emerging pathogenic strains of *Herellea*, *Mima*, *Citrobacter*, and *Serratia* have also shown *in vitro* susceptibility. Not stable in the presence of penicillinase. *Klebsiella* species are resistant. Some strains of *Pseudomonas* have developed resistance fairly rapidly. **Contraindications:** Known penicillin allergy. **Warnings:** Serious and occasional fatal hypersensitivity (anaphylactic) reactions have been reported in patients on penicillin therapy. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens. There have been reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, appropriate therapy should be instituted and discontinuance of disodium carbenicillin therapy considered, unless the infection is life threatening and only amenable to disodium carbenicillin therapy. The usual agents (antihistamines, pressor amines, and corticosteroids) should be readily available. **Usage in Pregnancy:** Safety for use in pregnancy has not been established. **Precautions:** As with any other potent agent, it is advisable to check periodically for organ-system dysfunction, including renal, hepatic, and hematopoietic systems, during prolonged therapy. Emergence of resistant organisms, such as *Klebsiella* species and *Serratia* species, which may cause superinfection, should be kept in mind. Each gram contains 4.7 mEq sodium; in patients where sodium restriction is necessary, such as cardiac patients, periodic electrolyte determinations and monitoring of cardiac status should be made. Observe patients with renal impairment for bleeding manifestations and adhere strictly to dosage recommendations. If bleeding manifestations appear, discontinue antibiotic and institute appropriate therapy. As with any penicillin preparation, the possibility of an allergic response, including anaphylaxis, may occur, particularly in a hypersensitive individual. **Administration:** Intramuscular injections should be made well within the body of a relatively large muscle (not into the lower and mid-third of the upper arm), and aspiration is necessary to help avoid inadvertent injection into a blood vessel. May be given by either intravenous injection or intravenous infusion. After reconstitution with Sterile Water for Injection unused portions should be discarded after 24 hours if stored at room temperature, or after 72 hours if refrigerated. **Adverse Reactions:** *Hypersensitivity Reactions*—Skin rashes, eosinophilia, pruritus, urticaria, drug fever, and anaphylactic reactions. *Gastrointestinal Disturbances*—Nausea. *Hemic and Lymphatic Systems*—Hemolytic anemia, thrombocytopenia, leukopenia, neutropenia, in uremic patients receiving high doses (24 gm/day), hemorrhagic manifestations associated with abnormalities of coagulation tests, such as clotting and prothrombin time. *Hepatic and Renal Studies*—SGOT and SGPT elevations have been observed, particularly in children. To date, no clinical manifestations of renal disorders have been demonstrated. *Central Nervous System*—Convulsions or neuromuscular irritability could occur with excessively high serum levels. *Local Reactions*—Pain at the site of injection, sometimes accompanied by induration. 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(Continued from Page 296)

Payne, Thomas Jefferson, III, b 37, mc Alabama '63, sb 64, University Hospital, Radiology Department, 1919 South 7th Avenue, Birmingham, Alabama 35233. R. (Resident)

Slappey, Donald Floyd, b 43, mc Alabama '67, sb 68, 1908 Courtney Drive, Birmingham, Alabama 35209. ObG.

Stewart, Robert Chauncey, b 15, mc Meharry '39, recip. Tennessee '45, 413 8th Avenue North, Birmingham, Alabama 35204. ObG.

Swan, John Luther, b 29, mc Alabama '58, sb 59, 1023 South 20th Street, 1-4 Medical Arts Building, Birmingham, Alabama 35205. R.

Tully, Albert Julian, Jr., b 38 mc Alabama '64, sb 65, Urology Department, University Hospital, 1919 South 7th Avenue, Birmingham, Alabama 35233. U.

Watkins, Phillip Candler, b 41, mc University of Alabama '66, sb '67, 1919 7th Avenue South, Birmingham, Alabama 35233. I. (Resident)

White, Robert Lewis, b 34, mc University of Texas Southwestern '64, recip. Texas '70, 1720 Springhill Avenue, Mobile, Alabama 36604. N.

Williams, Samuel Douglas, b 38, mc University of Alabama '68, recip. NBME '69, 619 19th Street South, Birmingham, Alabama 35233. P (Resident)

Yarbrough, Ralph Houston, b 38, mc University of Alabama '64, sb 65, Research Building, Room 321, 1919 7th Avenue South, Birmingham, Alabama 35233. I. (Resident)

Marengo County

Simpkins, William Russ, b 37, mc University of Tennessee '70, recip. Tennessee '71, 202 Highway 80 East, P. O. Drawer W, Demopolis, Alabama 36732. GP.

Morgan County

Mack, Robert Lynne, Jr., b 36, mc University of Arkansas '62, recip. Arkansas '70, Pineview Hospital, Box 31, Hartselle, Alabama 35640. GP.

(Continued on Page 302)

Hill Crest
HOSPITAL
Hill Crest Foundation, Inc.

7000 5th AVENUE SOUTH
Box 2896, Woodlawn Station
Birmingham, Alabama 35212
Phone: 205 - 836-7201

A patient centered not for profit hospital for intensive treatment of nervous disorders . . .

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium. Individual patient care has been the theme during its 46 years of service.

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James K. Ward, M.D., F.A.P.A.

CLINICAL DIRECTOR:
Hardin M. Ritchey, M.D., F.A.P.A.

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HILL CREST is fully accredited by the joint commission on Accreditation of Hospitals and is also approved for Medicare patients.

Hill Crest
HOSPITAL
BIRMINGHAM, ALABAMA

Russell County

Currier, Vincent Mathewson, Jr., b 37, mc Louisiana State University '63, recip. Louisiana '71, Cobb Memorial Hospital, Phenix City, Alabama 36867. R.

MEMBERS DECEASED

Baldwin County

Gessler, William Francis, Fairhope, Alabama, Deceased May 18, 1971.

Barbour County

Bennett, Clarence Rhodes, Eufaula, Alabama. Deceased June 27, 1971.

Cullman County

McAdory, Edward Dudley, Cullman, Alabama. Deceased August 5, 1971.

Jefferson County

Wiley, Clarence C., Birmingham, Alabama. Deceased August 5, 1971.

Marion County

West, Ernest Avent, Hackleburg, Alabama. Deceased July 28, 1971.

Shelby County

Stinson, Willie Elijah, Siluria, Alabama, Deceased June 28, 1971.

Tuscaloosa County

McLester, James Bowron, Tuscaloosa, Alabama, Deceased June 5, 1971.

MEMBERS REMOVED

Jefferson County

Friedman, Louis L., Birmingham, Alabama. Transfer to Nonmember.

Kirby, Joseph L., Jr., Birmingham, Alabama. Transfer to Nonmember.

McDaniel, Millie M., Birmingham, Alabama. Transfer to Nonmember.

Mullins, Charles E., Birmingham, Alabama. Transfer to Nonmember.

Peacock, Peter N. B., Birmingham, Alabama. Transfer to Nonmember.

Robinson, Leonard, Birmingham, Alabama. Transfer to Nonmember.

Russell, John W., Bessemer, Alabama. Transfer to Nonmember.

Straumfjord, Jon V., Jr., Birmingham, Alabama. Transfer to Nonmember.

MEMBERS TRANSFERRED

Blount County

Murphree, Roland Erskine, 1008 Park Avenue, Oneonta, Alabama 35121, from member Jackson County Medical Society to member of Blount County Medical Society. GP.

Covington County

Terrell, Dudley Joseph, Enterprise Hospital, Enterprise, Alabama 36330, from member Coffee County Medical Society to member of Covington County Medical Society. R.

Mobile County

March, Edward Russell, Jr., 1304 Government Street, Mobile, Alabama 36604, from member Jefferson County Medical Society to member of Mobile County Medical Society. I-C.

CHANGE OF SPECIALTY

Morgan County

Bowers, David Earl, 13th at Medical Drive, Decatur, Alabama 35601. Pd.

CHANGES OF ADDRESS

Butler County

Stabler, Ernest V., Jr., present Greenville, to 720 Ft. Dale Street, Greenville, Alabama 36037.

Cullman County

Dodson, Robert B., present Cullman, to 206 West 8th Street, Cullman, Alabama 35055.

Dale County

Ouzts, Len M., present Ozark, to 8 Cactus Drive, La Junta, Colorado 80150.

Dallas County

Combs, Robert M., present Selma, to 2119 East South Boulevard, Montgomery, Alabama 36111.

Etowah County

Johnston, William W., present Gadsden, to 401 Bay Street, Gadsden, Alabama 35901.

Geneva County

Merrill, Frederick G., present Slocomb, to 314 Commerce Street, Slocomb, Alabama 36375.

Houston County

Johnson, George E., present Dothan, to 1520 East Main Street, Dothan, Alabama 36301.

Jones, Patrick B., Jr., present Dothan, to Box 99, Dothan, Alabama 36301.

Jefferson County

Abernathy, Frank, Jr., present Birmingham, to P. O. Box 8098, Siluria, Alabama 35144.

Blythe, John C., present Birmingham, to 228 Clubview Drive, Alexander City, Alabama 35010.

Bushnell, James J., present Birmingham, to 924 South 19th Street, Birmingham, Alabama 35205.

Collier, James B., present Graysville, to 10 Crestview Circle, Birmingham, Alabama 35213.

Cooley, Harold N., present Birmingham, to 4713 Hatton Avenue, Montgomery, Alabama 36108.

Gantt, Charles B., Jr., present Graysville, to 3220 Pawnee Avenue, Birmingham, Alabama 35205.

Mullins, Charles E., present Graysville, to 507 Roselle Lane, Birmingham, Alabama 35210.

Pappas, Dennis G., present Birmingham, to 2940 Clairmont Avenue, Birmingham, Alabama 35205.

Rubin, Richard B., present Birmingham, to 1018 South 22nd Street, Birmingham, Alabama 35205.

Stafford, George T., III, present Fairfield, to 900 South 19th Street, Birmingham, Alabama 35205.

Tidwell, Owen K., present Birmingham, to Route 13, Box 461, Birmingham, Alabama 35243.

Wallace, Samuel H., Jr., present Philippi, West Virginia, to 4416 Clairmont Avenue, Birmingham, Alabama 35222.

Wells, Clay N., present New Orleans, La., to 2708 Woodridge Road, Birmingham, Alabama 35243.

Yake, Ronald F., present Rochester, Minnesota, to 3437 River Bend Road, Birmingham, Alabama 35243.

Lee County

Fuller, George E., present Opelika, to 1121 East Collinwood Circle, Opelika, Alabama 36801.

Mobile County

Harlin, Robert S., present Mobile, to 1653 Springhill Avenue, Mobile, Alabama 36604.

Weldon, Joseph M., present Laurel, Maryland, to 138 Bunting Drive, San Antonio, Texas 78227.

Montgomery County

Marshall, Wallace S., present Montgomery, to 3603 Lansdowne, Montgomery, Alabama 36111.

Russell County

Beck, Ronald V., present Phenix City, to 1906 20th Avenue, Phenix City, Alabama 36867.

Shelby County

Browne, William C., present Vincent, to Four Seasons Luxury Apts., 3101 Lorna Road, Birmingham, Alabama 35216.

(Continued on Page 304)

(Continued from Page 303)

Sumter County

Hill, Robert C., present York, to 404 College Street, York, Alabama 36925.

Tuscaloosa County

Brahen, Louis, present Tuscaloosa, to Alta Bates Comm. Hosp., 3000 Regent, Berkeley, California 94705.

Cone, Theodore S., present Tuscalcosa, to 303 Hargrove Road East, Tuscaloosa, Alabama 35401.

Folsom, James C., present Tuscaloosa, to Bryce Hospital, Tuscaloosa, Alabama 35401.

Tatum, Albert F., Jr., present Tuscaloosa, to P. O. Box 2708, Tuscaloosa, Alabama 35401.

NEW TELEPHONE NUMBERS

Anderson, Robert E., Dallas	874-9064
Beck, Jere L., Jefferson	785-2121
Brunson, Emmett T., Coffee	347-3404
Burleson, Paul W., Jefferson	933-7451
Combs, Robert M., Dallas	288-4172
Cone, Theodore S., Tuscaloosa	345-4055
Finchum, Robert N., Jefferson	780-4330
Gibson, Edward L., Coffee	347-8131
Glasser, Lewis, Jefferson	934-5384
Hundley, Rube R., Houston	794-4159
Hunter, John W., Jr., Jefferson	785-2121
Johnson, George E., Houston	792-7628
Johnston, William W., Etowah	547-8260
Kirkland, Lewis E., Shelby	665-7991
Morros, Constantine D., Jefferson	871-8385
Payne, Thomas J., III, Jefferson	934-5131
Rubin, Richard B., Jefferson	933-7627
Slappey, Donald F., Jefferson	879-6034
Stabler, Ernest V., Jr., Butler	382-2681
Swan, John L., Jefferson	251-4287
Tully, Albert J., Jr., Jefferson	934-3411
Wallace, Samuel H., Jr., Jefferson	595-5516
Wilensky, Allan S., Jefferson	780-4330
Yake, Ronald F., Jefferson	328-8770

(Continued on Page 307)

SALUTENSIN®
hydroflumethiazide, 50 mg./reserpine, 0.125 mg./ protoveratrine A, 0.2 mg.
Brief Summary of Prescribing Information—9-9/22/69.
For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: *Hydroflumethiazide:* Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
Usual Dose: 1 tablet b.i.d.
Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Service items pictured at right and Salutensin samples are available on request from your Bristol Representative or on written request.

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Division of Bristol-Myers Company
Syracuse, New York 13201

My Doctor's new program to help make hypertension easier to live with—

LET'S TALK ABOUT HYPERTENSION

My guide book from Dr. Fox...



Following my Doctor's good advice...

HEALTHY EATING HABITS FOR THE HYPERTENSIVE

No problem dieting with this to advise me.



Dining out— on my diet!



Getting the exercise I need-

HINTS TO HELP MAKE HYPERTENSION EASIER TO LIVE WITH:

- Get plenty of sleep. 8 hours a night is good, and a nap a day is better.
- Avoid strenuous activities that you aren't used to.
- Drink alcoholic beverages only in moderation.
- Don't smoke. Especially cigarettes.
- Try to avoid undue emotional strain and tension.
- Guide your eating habits by the restrictions on the reverse of this reminder card.

This goes where I go...

PATIENT'S NAME Mrs. S. Collins
AGE 55 DATE
Rx
Salutensin No. 30
Sig: one tablet twice daily
A. Fox M.D.

SALUTENSIN®
hydroflumethiazide, 50 mg./reserpine, 0.125 mg./ protoveratrine A, 0.2 mg.

This helps make my hypertension easier to live with, too.



The Bradley Center --- for the problems of living

An all new homelike open psychiatric residence on a lovely five-acre tract, centrally located within the community, providing a comprehensive range of continuous services, including in-patient, day care, and outpatient treatment. Each patient participates in an extensive and intensive treatment program, based almost exclusively upon multiple psychotherapeutic encounters. These include individual psychotherapy, group psychotherapy, the nursing milieu, occupational therapy, recreational therapy, topical small group discussions, and other group activities in the Center, as well as in the community, depending on individual needs and interests. Medications are prescribed when appropriate.

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Medical Director

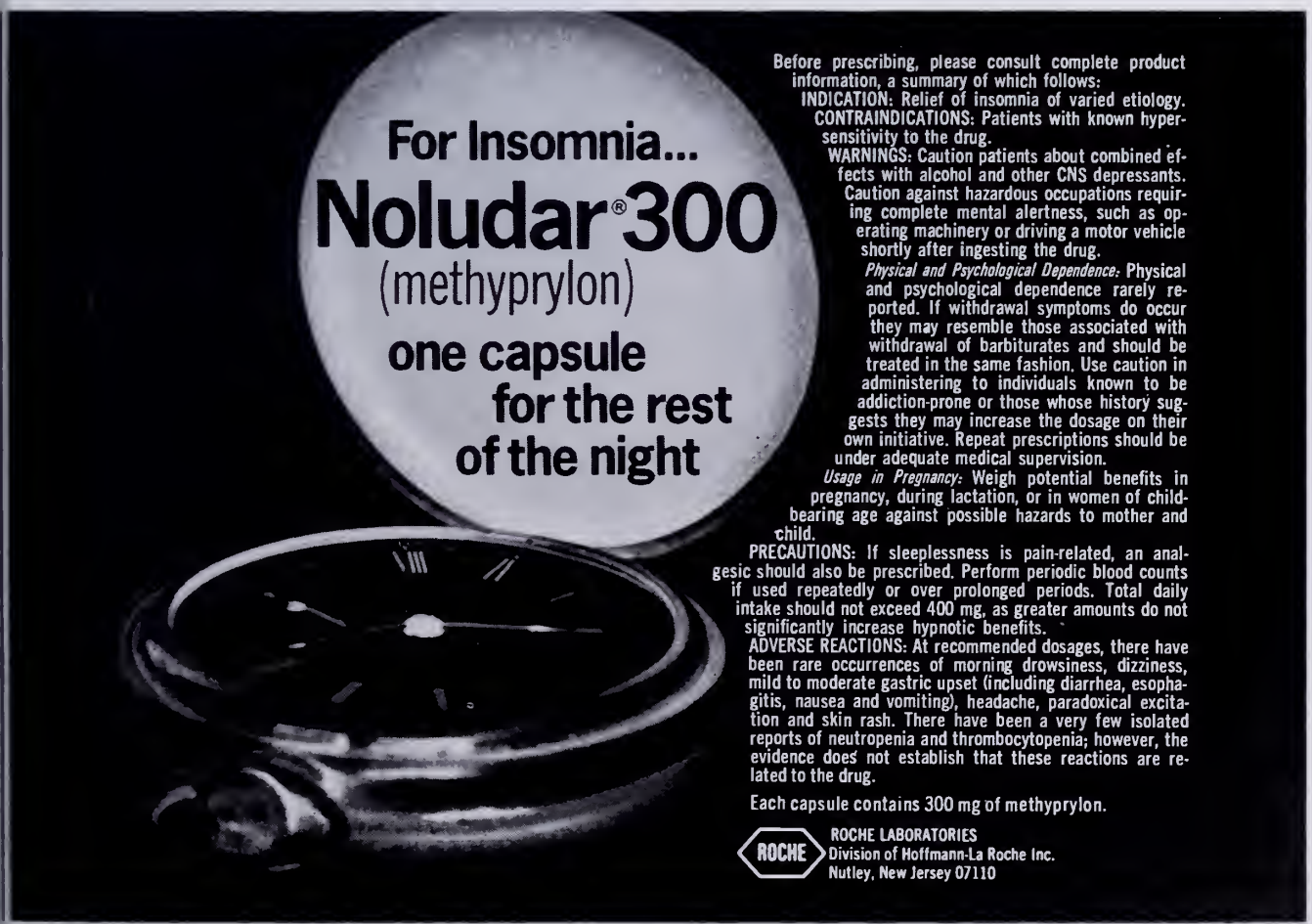
Maj. Gen. (ret.) Howard Snyder
Administrator

THE BRADLEY CENTER, INC.
2000 Sixteenth Avenue
Columbus, Georgia 31901
Area Code 404 324-4882

(Continued from Page 304)

NEW TELEPHONE NUMBERS

Abernathy, Frank, Jr., Jefferson	663-2691
Ballard, James W., Jefferson	591-2731
Browne, William C., Shelby	822-1607
Carter, Robert W., Jefferson	591-2731
Collier, James B., Jefferson	933-7937
Conwell, Hugh E., Jefferson	933-1460
Currier, Vincent M., Jr., Russell	298-7811
Ensor, Herman C., Jefferson	252-6121
Freeman, Arthur M., Jr., Jefferson	322-8753
Fuller, George E., Lee	745-4611
Glover, Lester B., Jefferson	591-2731
Goldstein, Richard P., Jefferson	324-6667
Graves, David B., Jefferson	934-5131
Harlin, Robert S., Mobile	433-3603
Henley, Felix T., Jefferson	591-2731
Kouchoukos, Nicholas T., Jefferson	934-4464
Lester, Richard L., Jr., Madison	539-1731
Lindsey, James D., Jefferson	780-2650
Lineberry, Dice K., Jefferson	252-6121
Luther, Jerry R., Jefferson	591-2731
Mack, Robert L., Jr., Morgan	773-2501
March, E. Russell, Jr., Mobile	344-5545
Martin, Robert F., Jefferson	323-1661
Miller, John M., III, Jefferson	934-3450
Moore, William J., Jefferson	934-5188
Morgan, Perry A., Jr., Jefferson	591-2731
Murphree, Roland E., Blount	274-2321
Neshat, Amir A., Crenshaw	335-6143
Pigford, Malcolm L., Jefferson	591-2731
Simpkins, William R., Marengo	289-0499
Smith, Chandler H., Jefferson	591-2731
Stafford, George T., III, Jefferson	323-5261
Stevens, Johnnie W., Blount	274-3561
Stewart, Robert C., Jefferson	324-3013
Teague, Eldred B., Jefferson	591-2731
Underwood, James W., Jefferson	591-2731
Vaughn, Henry M., Jefferson	591-2731
Watkins, Phillip C., Jefferson	934-3411
White, Robert L., Jefferson	432-4453
Williams, Samuel D., Jefferson	934-5164
Yarbrough, Ralph H., Jefferson	934-3505
Zenger, George H., Jefferson	591-2731



Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE
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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Hobbies To Fill A Doctor's Leisure

No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard.

—Sir William Osler, 1909

Growing Lovely Orchids, A Fascinating Avocation

The proud patrician of happy hobbies numbers its select devotees in Alabama, including at least one Montgomery doctor.

Displayed on the left front of his house, like a jeweled pin in a lady's party dress, is the greenhouse. And inside are the selections of H. Leon Rosen, M. D.—selections of species of what has been called "the elite of the plant world."

Those who pursue this particular hobby have been called "high priests of the Orchidology cult."



DR. H. LEON ROSEN

Leon Rosen was born on Thursday, January 12, 1911, in the coalmining village of Dora, in Walker County, Alabama, the son of a merchant. From grammar school and high school in his native town, he went to Vanderbilt, first for his baccalaureate, then for his M. D. degree. Following internship he returned to his native state, to its capital, to enter general practice and surgery until four years ago. That was when he entered the area of Pulmonary disease and became medical director of Greil Memorial Hospital, formerly the Montgomery Tuberculosis Sanatorium.

Pearl Harbor interrupted his practice five years after he began it, and young Dr. Rosen entered the service of his country in 1942. Four years later, with the return of peace, he returned from Army Air Corps Medical duty in England, to take up where he had left off.

Dr. Rosen was married first to the late Sylvia Berman of Anniston, who in the year 1949-50 served as the second president of the Montgomery-Autauga Medical Auxiliary. Dr. James R. Rosen is their son.

Following Sylvia Rosen's death, the Montgomery M. D. was married to another Alabamian, the former Edna Minisman of Birmingham.

Some 16 years ago, a friend showed him his greenhouse and he became infected with

(Continued on Page 312)

IN ASTHMA
IN EMPHYSEMA



optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

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Manufacturers of Ethical Pharmaceuticals

The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



ANTROCOL®

Antrocol provides the prompt, predictable antisecretory action of the belladonna alkaloid, atropine, fortified with sedation and blended with Bensulfoid, contributing to even absorption.



Each tablet or capsule contains: Atropine sulfate, 0.324 mg.; Phenobarbital, 16 mg. (may be habit forming); Bensulfoid, 65 mg. (see white section PDR). The atropine content of Antrocol is the maximum amount the average patient can take at six hour intervals over long periods with comfort.

SUPPLIED
Tablet in bottles of 100, 500 and 5000
Capsule in bottles of 100, 500 and 1000

Caution: Federal law prohibits dispensing without prescription.

PRESCRIBING INFORMATION

Contraindicated in glaucoma. Use cautiously in prostatic hypertrophy. Side-effects of toxic dose of atropine: flushing, dryness of mouth, cycloplegia, tachycardia and urinary retention.

DOSAGE: One tablet or capsule after each meal to correct emotional stress and normalize gastric secretions. In treating peptic ulcer, doses at regular intervals up to eight (8) tablets or capsules per day to provide the proper gastric titer for healing. After ulcer has healed, one tablet or capsule after each meal to maintain a titer unfavorable to recurrence.

Clinical supply available to physicians.

WILLIAM P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals

Now you... a single doctor can incorporate!



July 31st Amendment
to the Professional Association
Act of 1961 enables one or more
physicians to form a professional association

This means you can turn tax dollars into savings dollars. More and more doctors are incorporating for tax savings and now under the new amendment you can become a professional association as a single doctor.

Some advantages now available to you through tax deductible programs are:

- Pension Plans
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- Major Medical Hospitalization
- Group Term Insurance
- Disability Insurance
- Business Overhead Expenses

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- Voluntary Plans
- Deferred Compensation
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This new state amendment can mean tax savings for you. We will help you analyze your situation at no cost or obligation. We will give you, your CPA, and your attorney a computerized analysis of the many advantages open to you and your association.



LL G. LAMBERT
ce President

B. S. Degree in Engineering, Louisiana State University; Post Graduate Work in Business, Troy State University; Graduate of New York Institute of Finance; Stock Broker with New York Stock Exchange Firm.

Specializing in: Actuarial Calculations and Valuations, Cost Studies and Business Manager of the Montgomery Office.

CONTACT:

KDW&A INC

P. O. Box 23
777 South Lawrence Street
Montgomery, Alabama 36101
Telephone: 262-0356

Hippocratic Oath Superseded

An Associated Press dispatch out of Miami reports that:

Because Hippocrates' oath bans abortions, the University of Miami's 1971 class of doctors instead took the Oath of Maimonides which pledges them to "never see in the patient anything but a fellow creature in pain."

The Oath of Maimonides is shorter and more general in nature. It does not specifically mention abortion, as the Hippocratic oath does.

A university official said he considered the Maimonides pledge more in keeping with modern times and free of outdated concepts contained in the Hippocratic.

"I feel the primary reason our class decided on the Oath of Maimonides instead of the Hippocratic Oath was the abortion prohibition being archaic," said Dr. Steven Rosenthal.

(Continued from Page 308)

an interest in orchids. It is an "infection" that has never relented.

Primarily epiphytic, a non-parasite that lives largely on the air around it, the orchid is a remarkable exotic plant, distinctive for its flower form and the delicate shades of its coloring. Of the estimated 15,000 distinctive species, Dr. Rosen has chosen the lovely Cattleya, a species native to the tropical rain forests of Colombia.

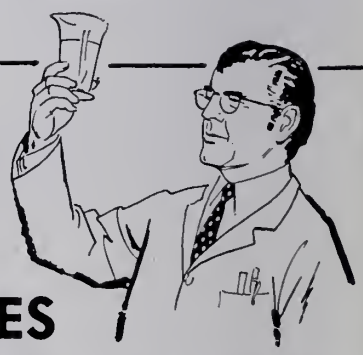
And, showing a modesty uncommon among orchid "cultists," Dr. Rosen will tell you: "They take less care than people think."

—W. J. M., Jr.

You first parents of the human race . . . who ruined yourself for an apple, what might you not have done for a truffled turkey?

—Brillat-Savarin.

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for PHYSICIANS•HOSPITALS
• NURSING HOMES



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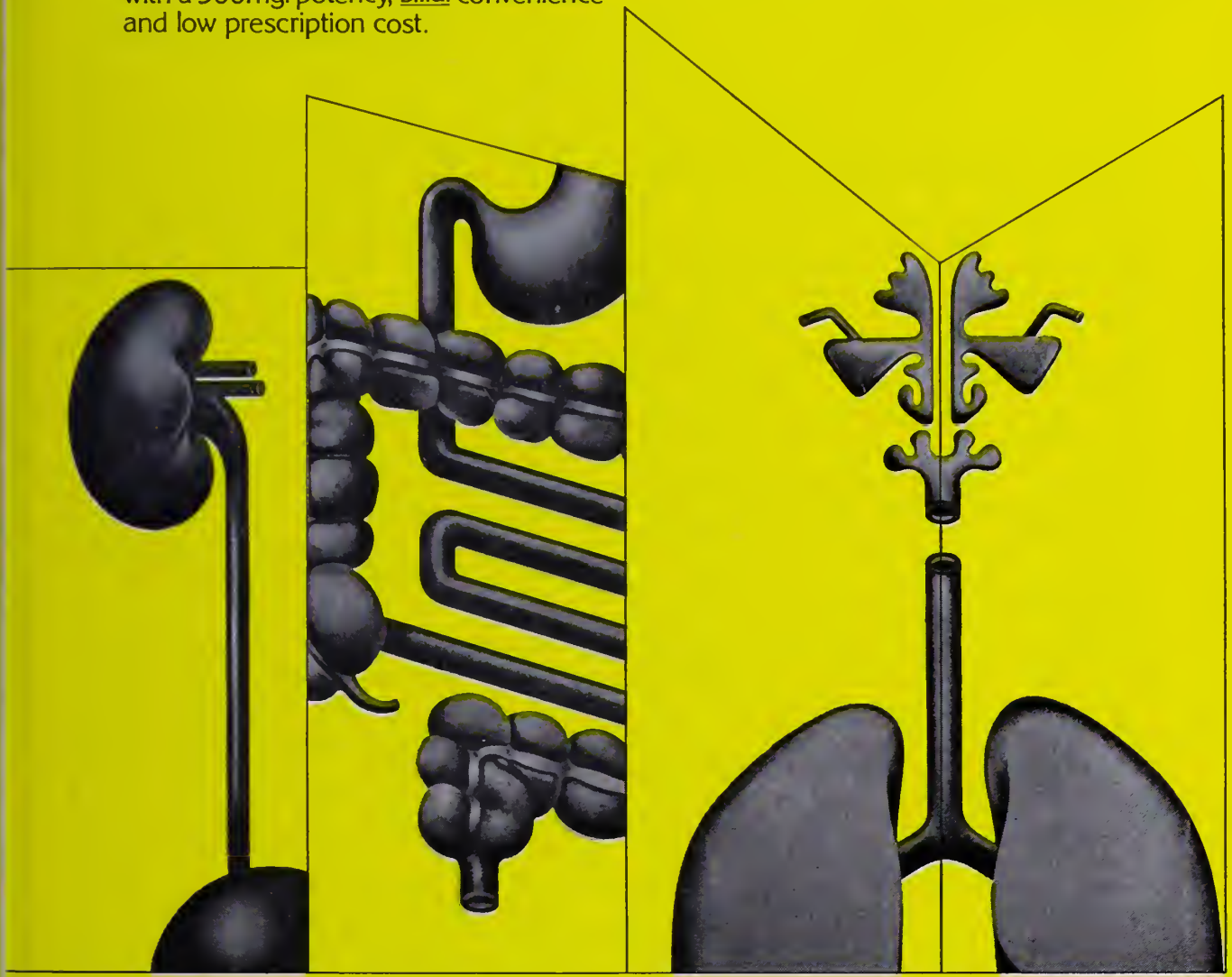
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Also infections due to Gram-positive and Gram-negative organisms, when bacteriologic testing indicates appropriate susceptibility to the drug.

Contraindications: Hypersensitivity to tetracyclines.

Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary with prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfection may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for at least 4 months.

Plasma prothrombin levels may be depressed, patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, periodic laboratory evaluation of hematopoietic, renal and hepatic organ systems should be performed.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. Infants may develop increased intracranial pressure with bulging fontanels. Hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia have been reported.

Usual Dose: *Usuol Adult Dose:* One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

Dermatology—

Age 30; University of Texas Medical Branch, 1966; Board eligible; seeking solo, group, or associate practice. Available July 1972. LW-9

General Practice—

Age 28; Medical College of Alabama, 1967; National Board; serving general surgery residency. LW-3

Age 49; University of Pittsburgh, 1951; seeking group or industrial practice. LW-3/1

Age 27; George Washington University 1969; National Board. LW-3/2

Age 37; University of Louisville, 1964; seeking group, industrial, associate, or institutional practice. LW-3/3

Internal Medicine—

Age 36; University of Pennsylvania, 1961; Board certified; seeking group, associate, or hospital practice. Available October 1971. LW-4/10

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Ophthalmology—

Age 30; Georgetown University School of Medicine, 1965; National Board. Available March 1972. LW-6/1

Age 35; Louisiana State University, 1963; Board eligible, seeking group or associate practice. Available January 1972. LW-6/3

Orthopedic Surgery—

Age 32; University of Illinois, National Board, seeking associate practice. Available February 1972. LW-14

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Age 31, Temple University, 1965; National Board; seeking group or associate practice. Available July 1972. LW-14/2

University of Illinois, 1965; National Board; seeking group or associate practice. Available July 1, 1972. LW-14/3

Pathology—

Age 39; Ankara Medical School, Turkey, 1956; Board eligible; seeking associate practice. LW-8/2

Age 39; St. Louis University College of Medicine, 1960; Board certified; seeking associate practice. Available October 1, 1971. LW-8/3

Age 48; Northwestern, 1947; Board certified; Available September 1971. LW-8/4

Age 40; Tulane University, 1956; seeking associate practice; Available September 1971. LW-8/5

Radiology—

Age 32; Medical College of Alabama, 1963; completing residency in radiology. LW-24/2

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 37; Indiana University, 1960; Board certified, seeking associate practice. Available summer-fall 1971. LW-10/5

Age 31; Medical College of Georgia, 1966; National Board; Board certified; seeking group practice; Available August 1, 1972. LW-10/6

Age 60; Medical College of Virginia, 1943; Board certified; seeking group, solo, or associate practice; Available September 1971. LW-10/7

Surgery—

Age 55; University of Nebraska College of Medicine, 1948; National Board; Board certified; seeking solo, group, associate, or institutional practice; Available October 1971. LW-11/6

Age 33; University of Maryland, 1965; seeking solo, group, or associate practice; Available July 1973. LW-11/7

Physicians Wanted

Special Openings—

Community of 3 adjoining towns with a total population of 30,000 and outlying rural area of 20,000, located in Northwest Alabama, with needs for General Practitioners and specialists including Otolaryngology, Internal Medicine, OB-Gyn, Pediatrics, Psychiatry, Surgery, Urology and Orthopedics. 2 modern hospitals with total beds of 351 and plans for a 15 suite professional bldg. adjacent to one of the hospitals. Industrial area with outlying agricultural areas. Excellent recreational facilities including fishing, hunting, boating and golf. PW-13

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

Wanted, internists, generalists, radiologist, orthopedist, general surgeons, town of 15,000 population in county of 45,000 population in southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-17

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

Opportunity in town of 4,000 population in trade area of 50,000 population, located within 100 miles of two metropolitan areas in south Alabama. Industrial and farming area. 44-bed hospital. Office space and equipment available in new building with another physician. Several churches, schools, and service clubs. PW-1

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

For town of 10,000 population in county of 40,000 population located in scenic mountainous section of Northeast Alabama. Office space and equipment available. Hill-Burton hospital-nursing home. Expanding industries in top agricultural area. PW-1-2

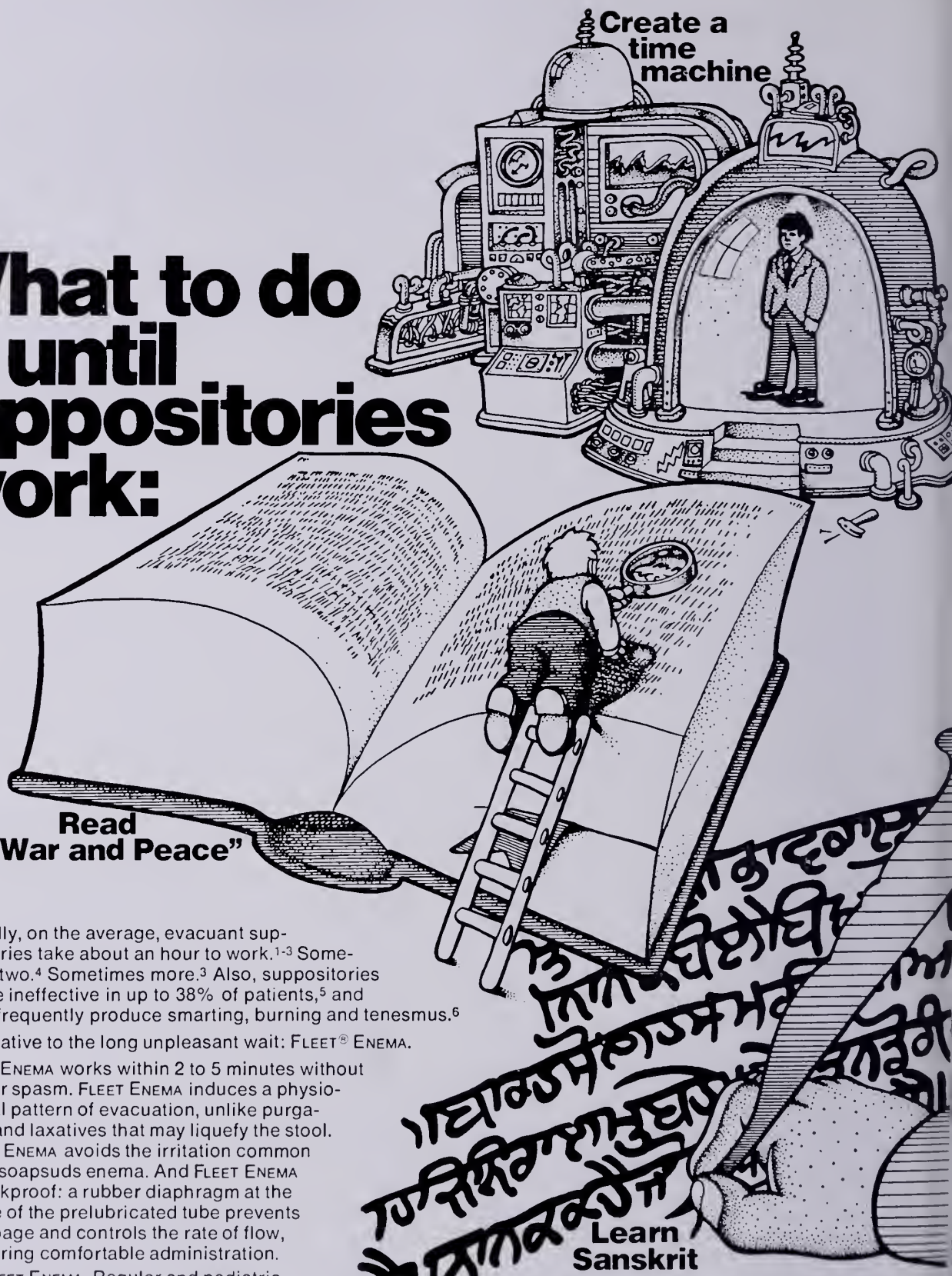
Opportunity in town of 2,500 population in Northeast Alabama in trade area of 15,000 population, located 7 miles from city of 55,000, and four miles from a 300-bed modern hospital. Position available for one who has not served military commitment. Clinic building and some equipment available. Willing to build a new clinic for two doctors or a small group. Especially seeking general practitioner and internist. PW-1-7

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

Associate needed in general practice and surgery in northeast Alabama town of 6,000 population. Modern 70-bed hospital. Prefer doctor less than 40 years of age. Salary guaranteed first year, then partnership. PW-1/9

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11

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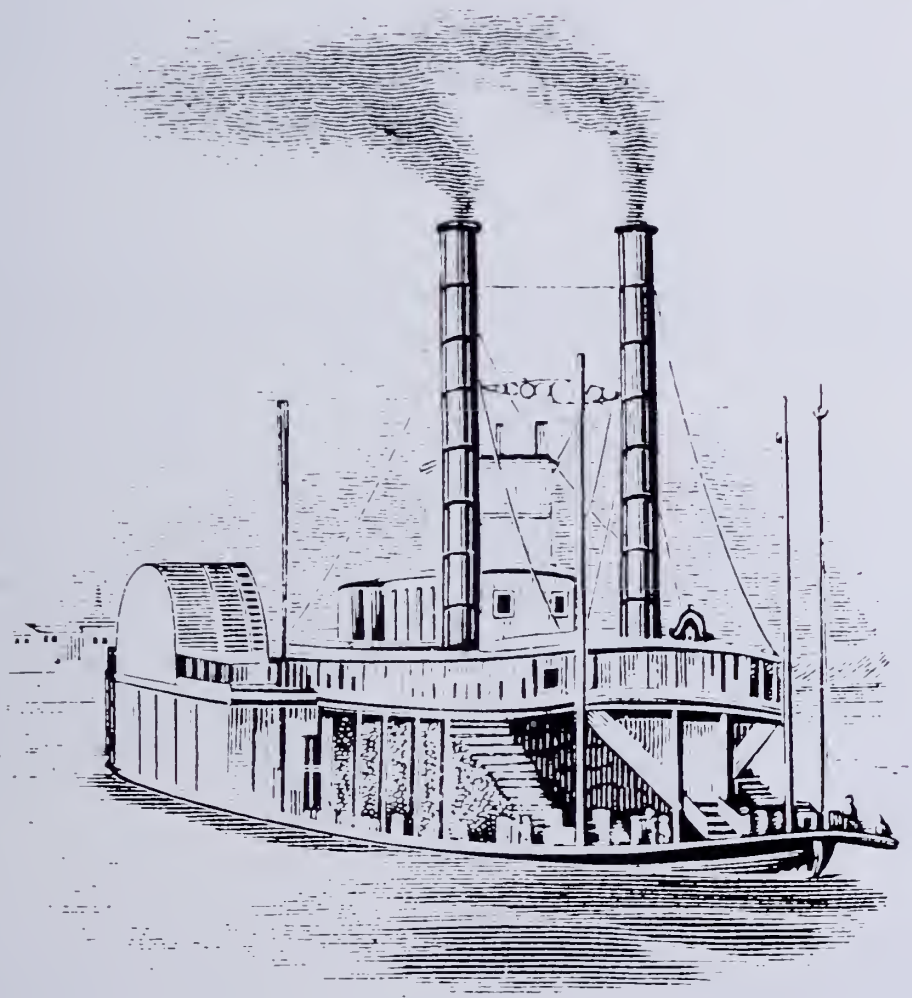
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References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964

Alabama's first meeting of a Medical Society was held at Mobile in 1847. Physicians from the northern section of the State probably traveled by horseback or stagecoach to Tuscaloosa, then by riverboat to Mobile.

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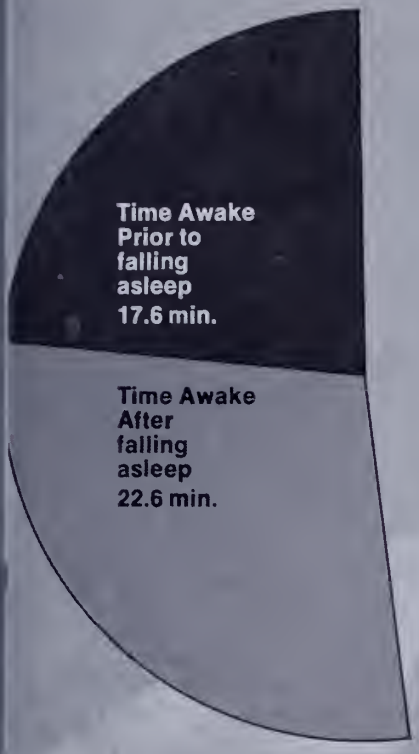
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Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

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of the

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Volume 41 • November, 1971 • No. 5

Office of Publication
19 So. Jackson St. .... Montgomery, Ala. 36104
Subscription Price ..... $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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President's Page



Archie E. Thomas, M. D.

The beautiful fall weather is with us now and the warm days of summer linger only in our memories.

The Special and Regular Sessions of the 1971 Legislature were hectic and exciting, but the chaos and confusion linger in our memories.

In all, 324 health related bills were introduced. Most of the bills disapproved by the medical profession failed to become laws.

We sincerely thank the governing bodies and all concerned citizens who participated in the fight for a better health program for our state.

We realize that, come another year, our friends (?) the chiropractors, will be with us again, fighting for a toe-hold in the health care field. We also realize that schemes for the dilution of the State Board of Health will be brought up again.

Our fight has just begun. We sincerely hope that we will profit by this year's activities, and that we can count upon all of you to roll your sleeves a little higher and continue the good work for the principles that have made medicine in Alabama the envy of the world.

Thank every one of you again.

Archie E. Thomas, M. D.
President

Page 1

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2 DATE OF FILING: October 1, 1971
3 FREQUENCY OF ISSUE: Monthly
4 LOCATION OF KNOWN OFFICE OF PUBLICATION *(Street, city, county, state, ZIP code) (Not printers)*: 19 South Jackson Street, Montgomery, Montgomery, Alabama 36104
5 LOCATION OF THE HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHERS *(Not printers)*: 19 South Jackson Street, Montgomery, Alabama 36104
6 NAMES AND ADDRESSES OF PUBLISHER, EDITOR, AND MANAGING EDITOR
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Medical school loans are up 82 per cent this year. There is every evidence that more will be needed in the future. All of us are looking forward to the expansion of our medical school in the next couple of years. We take care of our own loans and scholarships by supporting this program.



Mrs. Gilder L. Wideman

I will remind those of you who wish to support your out-of-state favorite medical school to please make your donations through our Auxiliary. Your choice of medical school receives the money but we take the bows for donations from our state. Your check is made out to AMAERF and write "designated for ..... Medical School". Give to your local AMAERF chairman or mail to Mrs. Johnson.

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Frances Wideman
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Editorial COMMENT

The Cult That Outsmarted Itself

Eight years after a chiropractic bill passed the New York Legislature, with the enthusiastic support of the chiropractors, the consequences of that law are becoming audible. And the sound is strangely like a death rattle.

In the eight years since passage of the bill, and its signing into law by the Governor, not a single new graduate of a school of chiropractic has been licensed to practice in the State of New York!

Philip R. Johnston, acting secretary of the State Board of Chiropractic Examiners, announced earlier that all chiropractors in practice before 1963 have "now had five chances to pass the qualifying examinations." Those who have not yet passed, he warned, "will have to terminate their practices."

The law provides that no new graduate of a school of chiropractic can take the examination required for licensure unless that school has been inspected and approved by the State Education Department. To date, according to a special article distributed by the Buffalo Evening News, "not a single one of the 12 schools of chiropractic in the United States has received that approval."

Thus in the nation's most populous state, a cult has outsmarted itself.

Spaceship Nearing Rendezvous With Mars

After traveling well over 200 million miles to span the mere 34 million miles separating earth from the war planet, an American spacecraft will be nearing its rendezvous with destiny about the time this editorial appears in print.

Mariner 9 has been chugging along at close to 60,000 miles an hour (59,987, to be exact) since it was launched last May 30th in pursuit of Mars in a solar orbit. And come Saturday, Nov. 13, it is expected to go into orbit around the red planet. Its job for three months after that is to map some 70 per cent of the Martian surface with two television cameras, additionally recording atmospheric and surface data, all to be promptly relayed to eager scientific watchers on earth.

So, very soon, if all goes well, we'll know if there is life on this most promising planet in our solar system—or if the dream of Edgar Rice Burroughs and other "science-fiction" writers was all fiction.

And meantime medicine may be expected to continue to find ways of adapting space age technology to the physical welfare of humans who people the earth—for example, in such directions as diagnosis, treatment and rehabilitation of neurological disorders.

MASA and NASA may yet prove closer than you'd think!

GUEST EDITORIAL

An Initial Analysis
U. of S. A. Medical College Dean Reports on Early Progress

The city of Mobile contains many of the basic elements necessary for the creation of formal health educational programs and the establishment of a Medical College, which, in simplest terms, represents an organizational structure which brings together the elements of academic scholarly inquiry and the application of science to the delivery of health care.

Among the resources already present, the University of South Alabama represents the critical academic element. A young and vigorous University, it offers an environment conducive to amalgamating medical education into the basic fabric of the University, particularly because of the absence of rigid and constraining traditions and territorial enclaves. At the same time, it has many resources to contribute. An example is a fine University library which already has a substantial number of volumes needed for the faculty and the students in medicine and which can, for at least some time in the future, expand its functions and thus eliminate the necessity for creating a separate medical library. A number of other university teaching and services resources are also available, the only element lacking being that of the specific basic medical sciences of anatomy, physiology, etc.

The community is endowed with several excellent hospitals and health centers already engaged in some teaching endeavors and capable of accommodating substantial increases in teaching programs. Without exception, all have indicated sincere interest in collaborating—The Mobile General Hospital, The Mobile Infirmary, The Providence Hospital, The Mobile Mental Health Center, and The Rotary Rehabilitation Center. Undoubtedly, there will be other institutions in the larger Gulf Coast area which will also be involved but time has not yet allowed their specific identification and the role which they may play.



ROBERT M. BUCHER, M. D.

But the greatest resource is the interest and dedication expressed by the professional community and the backing of the lay community. A committee of the Medical Society has guided the formation of the school and it can be anticipated that the presence of many excellent physicians and other health professionals represents a body which can already be considered faculty of the college.

GENERAL PROGRAM DESIGN

Although the development of specific detail of program will require additional time, it is possible to make several general statements of the characteristics of the college. It will utilize existing resources to the utmost. That

(Continued on Page 328)

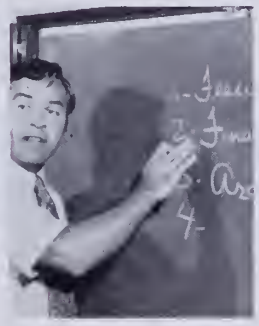
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(Continued from Page 326)

is, the medical educational process will be designed to utilize elements already available within the University, as well as elements within the medical care system which are capable of accommodating medical education. This immediately means that the school will not have one single geographic locus. Rather, activities will be housed at many locations and the individual faculty will be based at those sites where the bulk of their activities are conducted. This will necessitate the provision of logistic and communication support but offers the opportunity for producing one of the first four-year medical colleges which is truly community-based.

The initial steps to be taken are those of identifying the essential elements which are lacking and of providing for them in order that the total operation can achieve reality. Basic science faculty in the areas of anatomy, bio-chemistry, physiology, micro-biology and pharmacology, are non-existent; thus, recruitment efforts are being undertaken to obtain faculty representing these competencies and plan for their housing.

At the same time, it is necessary to identify those physical resources which cannot be obtained within existing institutions. Although the University has some space which can be utilized for a small group of students, there is need for substantial space to house basic science teaching elements of the curriculum. Thus, a basic science facility is one of the urgent needs.

Immediately following this and, to be planned in continuity, are the additional clinical teaching resources which must be added to existing hospitals and other care facilities.

One of the principles which will be followed is to build the basic science teaching faculty of the Medical College in such a way that its contributions are pertinent to the development of total University programs. Anatomists, bio-chemists, and others who are needed for the teaching of medical students will also be able to make contributions to the development of strength in the biologic sciences of the University and to the production of quality graduate educational programs in the biologic science disciplines.

TIME TABLE

The urgency of need for opportunity for medical education is recognized. There have already been large numbers of students who have evidenced intent to apply for admission and experience in this state and others indicates that large numbers of qualified students are currently not being accommodated in the existing medical colleges. Because of this urgency a time table is being projected even though it is difficult to be highly specific at this moment.

It is anticipated that there will be a sufficient number of basic science faculty identified to allow the school to apply for provisional accreditation during the next several months. Should such accreditation be obtained, notification would be received in mid-April. Schematics for the basic science teaching facilities are now almost completed and the architects will proceed rapidly toward the production of working drawings. As this is accomplished, it will be possible to anticipate the date upon which adequate basic science teaching space will be available. Once this date is secure, it will then be possible to consider admitting students approximately one year in advance of that time. The university has certain facilities which can be provided to the Medical College which would accommodate a small group of students for the first year of the curriculum. However, before actually entering these students, it is essential to be sure that by the time they reach the second year of study it will be possible to provide to them the continuation of their curriculum as well as to admit an additional class.

At this moment inquiries from applicants are being filed and application materials will be sent to them as soon as there is a reason-

(Continued on Page 332)

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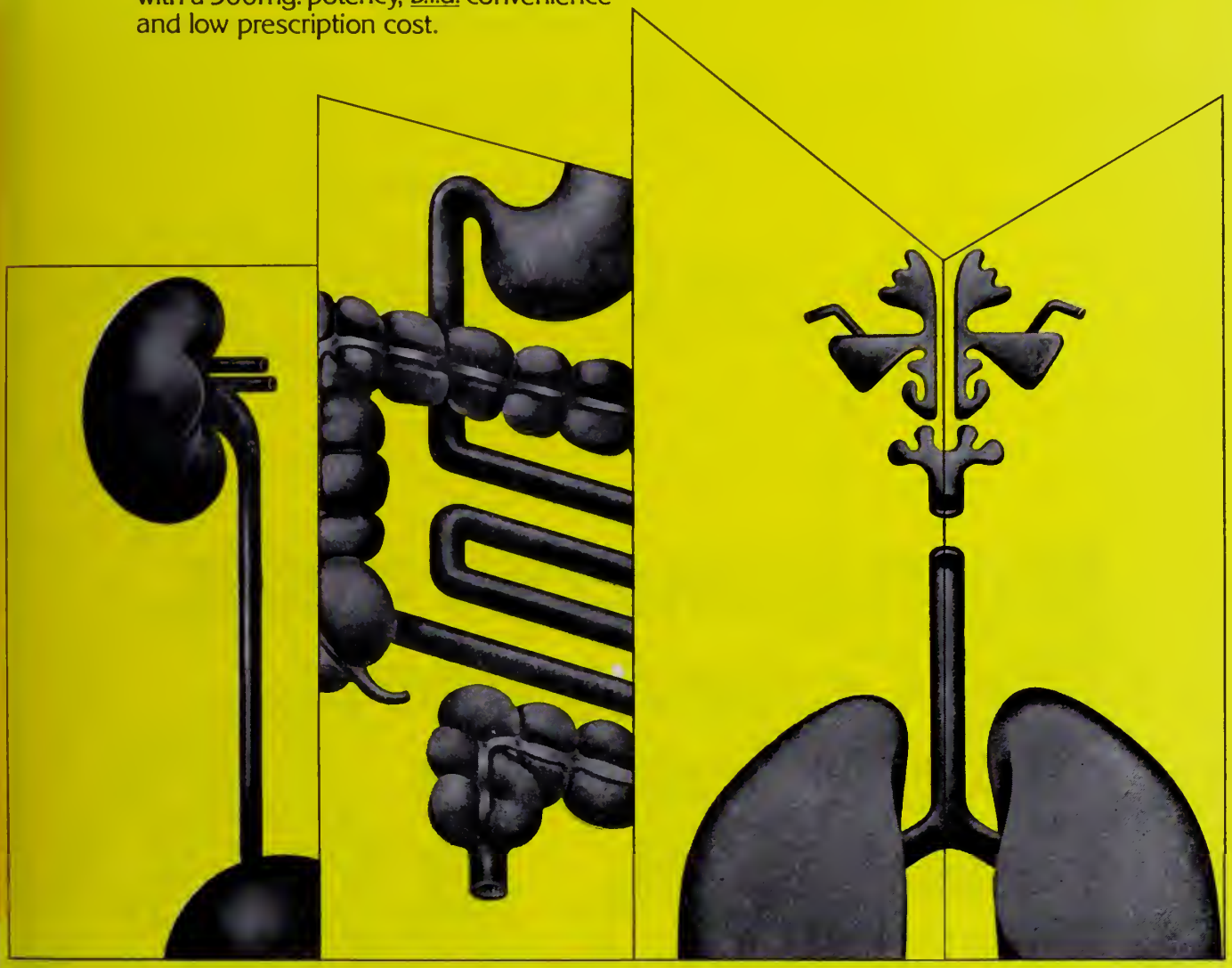
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Also infections due to Gram-positive and Gram-negative organisms, when bacteriologic testing indicates appropriate susceptibility to the drug.

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Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used and serum estimations may be necessary with prolonged therapy. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).

Precautions: Mycotic or bacterial superinfection may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for at least 4 months.

Plasma prothrombin levels may be depressed, patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, periodic laboratory evaluation of hematopoietic, renal and hepatic organ systems should be performed.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. Infants may develop increased intracranial pressure with bulging fontanels. Hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia have been reported.

Usual Dose: *Usuol Adult Dose:* One Gm./day in 2 or 4 equally divided doses. Continue therapy for ten days in Group A beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

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(Continued from Page 328)

able assurance that a specific entering date can be achieved.

In closing, I would like to express appreciation to the leadership of the University of Alabama in Birmingham for the excellent cooperation which they have extended. I fully anticipate that these two state institutions should be able to work together. Although they may be somewhat different in type, they can, by complementing one another, work coordinately to the advantage of the entire state in meeting its urgent needs for all types of health manpower.

Robert M. Bucher, M.D.

Laundry-Product Hazards

Substances which may be hazardous to premature and full-term newborn infants are still being used in the laundering of clothing, diapers and bedding for hospital nurseries, the American Academy of Pediatrics has warned in its current Newsletter.

In a statement issued by the AAP's Committee on Drugs, the Academy points out that cases have occurred in which premature and full-term newborn infants have contracted methemoglobinemia after their diapers were rinsed with the bacteriostatic agent 3-4-4' trichlorocarbanilide (TCC).

Methemoglobinemia is a condition caused by various poisons resulting in a lack of oxygen which may lead to death or serious disturbance of the vital functions.

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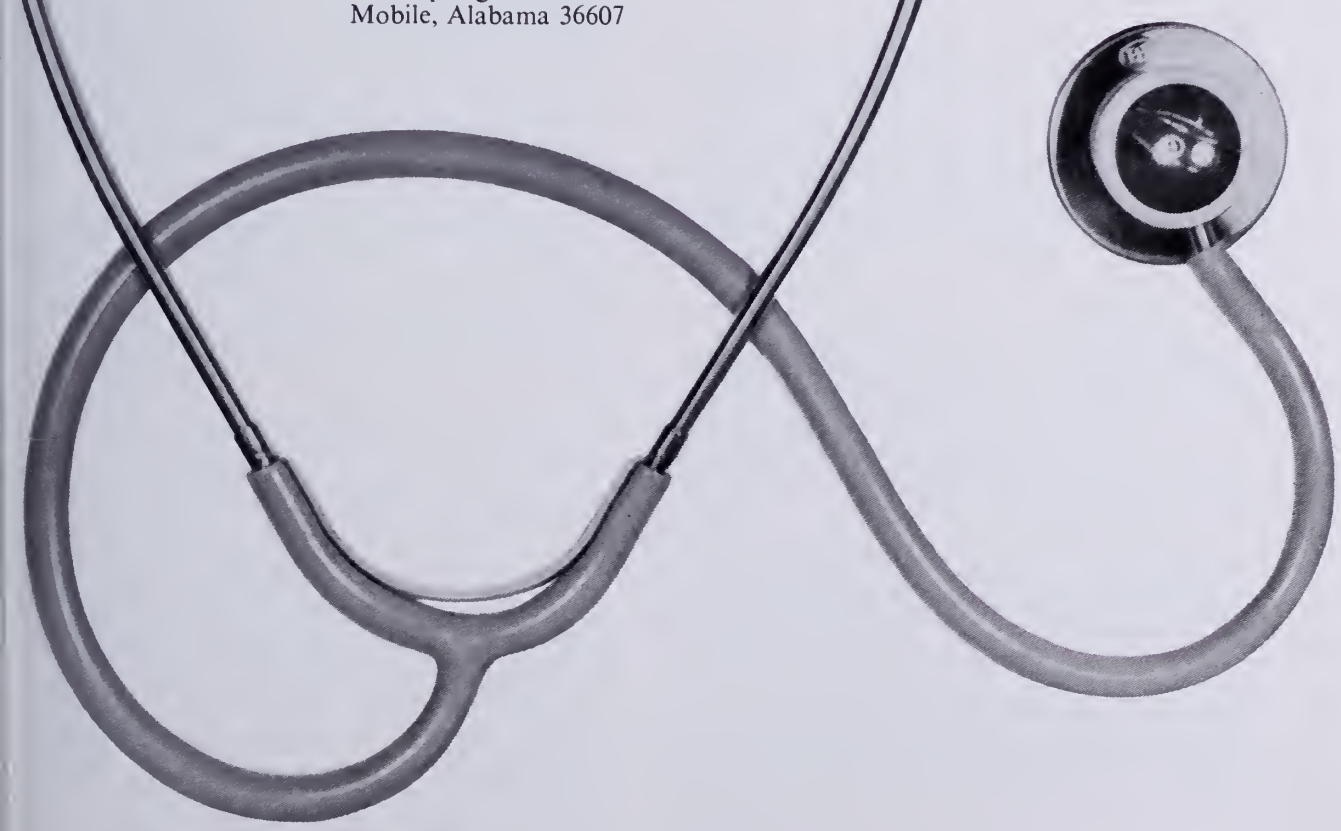
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The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

General Practice—

Age 28; Medical College of Alabama, 1967; National Board; serving general surgery residency. LW-3

Age 49; University of Pittsburgh, 1951; seeking group or industrial practice. LW-3/1

Age 27; George Washington University 1969; National Board. LW-3/2

Age 37; University of Louisville, 1964; seeking group, industrial, associate, or institutional practice. LW-3/3

Internal Medicine—

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Age 31; University of Chicago, 1967; National Board; seeking group or associate practice; would prefer to work primarily as a general internist and part-time as an autopsy pathologist. Available July 1972. LW-13/7

Ophthalmology—

Age 30; Georgetown University School of Medicine, 1965; National Board. Available March 1972. LW-6/1

Age 35; Louisiana State University, 1963; Board eligible, seeking group or associate practice. Available January 1972. LW-6/3

Orthopedic Surgery—

Age 32; University of Illinois, National Board, seeking associate practice. Available February 1972. LW-14

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Age 31, Temple University, 1965; National Board; seeking group or associate practice. Available July 1972. LW-14/2

University of Illinois, 1965; National Board; seeking group or associate practice. Available July 1, 1972. LW-14/3

Age 53; Cambridge University, 1943; seeking solo practice. Available January 1, 1972. LW-14/4

Pathology—

Age 39; Ankara Medical School, Turkey, 1956; Board eligible; seeking associate practice. LW-8/2

Radiology—

Age 32; Medical College of Alabama, 1963; completing residency in radiology. LW-24/2

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 37; Indiana University, 1960; Board certified, seeking associate practice. Available summer-fall 1971. LW-10/5

Age 31; Medical College of Georgia, 1966; National Board; Board certified; seeking group practice; Available August 1, 1972. LW-10/6

Surgery—

Age 33; University of Maryland, 1965; seeking solo, group, or associate practice; Available July 1973. LW-11/7

Age 33; University of Tennessee, 1967; seeking practice in General Surgery. Available July 1972. LW-11/8

Physicians Wanted

Special Openings—

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Physicians Wanted

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

Wanted, internists, generalists, radiologist, orthopedist, general surgeons, town of 15,000 population in county of 45,000 population in southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-17

Wanted: Immediately. Pediatrician to replace recently deceased partner in northeast Alabama. Enter busy practice in a predominantly GP area. Enjoy rural, quiet living with nearby scenic and recreational facilities. Salary, practice, everything negotiable. PW-19

Physician wanted. Student Health Service, University of Alabama. Eight full-time physicians. New facility. Competitive salary. Liberal vacation. Excellent fringe benefits. PW-20

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

Opportunity in town of 4,000 population in trade area of 50,000 population, located within 100 miles of two metropolitan areas in south Alabama. Industrial and farming area. 44-bed hospital. Office space and equipment available in new building with another physician. Several churches, schools, and service clubs. PW-1

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

For town of 10,000 population in county of 40,000 population located in scenic mountainous section of Northeast Alabama. Office space and equipment available. Hill-Burton hospital-nursing home. Expanding industries in top agricultural area. PW-1-2

Opportunity in town of 2,500 population in Northeast Alabama in trade area of 15,000 population, located 7 miles from city of 55,000, and four miles from a 300-bed modern hospital. Position available for one who has not served military commitment. Clinic building and some equipment available. Willing to build a new clinic for two doctors or a small group. Especially seeking general practitioner and internist. PW-1-7

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

Associate needed in general practice and surgery in northeast Alabama town of 6,000 population. Modern 70-bed hospital. Prefer doctor less than 40 years of age. Salary guaranteed first year, then partnership. PW-1/9

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11

AMA Statement on Venereal Disease

The American Medical Association reports that gonorrhea ranks first and syphilis third among the reportable communicable diseases in the U. S. A. For the year ending June 1970, infectious syphilis rates were eight per cent higher than a year earlier. At the same time gonorrhea morbidity exceeded 573,000 reported cases. Gonorrhea is pandemic in the United States, with an estimated two million cases.

The Council urges all physicians to be sensitive to the growing and alarming dimensions of the VD problem. Physicians in private practice treat 80 per cent of all syphilis and gonorrhea but report to public health departments only one out of every eight cases of syphilis and one out of every nine cases of gonorrhea they treat. Physicians should assist public health departments by reporting these VD cases. Much effort must still be made by health departments and medical societies to foster mutual trust so that public and private medicine can work effectively for the control of syphilis and gonorrhea. Medical societies should continue efforts for the enactment of state laws to permit physicians legally to treat VD cases of minors without obtaining parental consent. Most now have laws which permit physicians to treat a minor for VD without adult consent. Also, medical societies are asked to support education of patients and the public through more extensive and imaginative use of all available media and through school curricula.

—Journal of the Medical Society of New Jersey



Hill-Burton In Alabama—25 Years Later

The health facilities system in Alabama has, with Hill-Burton assistance, moved from near the bottom in the nation to a position of leadership, according to Clay Dean, director, Bureau of Health Facilities Construction, Alabama Department of Public Health.



CLAY DEAN

Better patient care in 103 Alabama communities is a direct result of the Hill-Burton hospital and medical facilities construction program, now celebrating 25 years of existence.

Hill-Burton has participated in 346 health facilities projects in Alabama bringing more than $113.5 million to the state since the program's inception. Total cost of the projects is reported to be $292 million with the remaining funds coming from state, local, and voluntary sources.

Dean said that 19 of the 67 counties had no health facilities in 1947, and only four counties had enough general hospital beds to meet their needs. "In 1971 no person in the state lives more than 30 minutes from a modern, up-to-date hospital. Nursing homes were non-existent but now provide service throughout the state."

Hill-Burton projects for the past 25 years have included 180 hospitals, 75 public health centers, the state laboratory building, and a number of nursing homes, outpatient clinics, and rehabilitation facilities.

"In 1947 the problem was where to find a hospital bed," Dean added. "In 1971 the problem is how do we improve on quality care."

Among current Hill-Burton projects is the construction of the Lurleen B. Wallace Developmental Center, a $6 million mental retardation facility scheduled to open soon in Decatur.

Hill-Burton funds totaling $3.6 million have been allocated in 1971 for the construction of 11 health facilities which have a total estimated cost of almost $8 million.

In comparing Alabama's success with the Hill-Burton program with that of other states, Dean claims that on a per capita basis Alabama has gotten more than its share. While Alabama has less than two per cent of the nation's population, the state has been the recipient of more than 6.5 per cent of the total Hill-Burton dollars expended.

Historically, the first Hill-Burton hospital built in the United States is located at Langdale, Alabama. The second public health center in the United States constructed under the program is in Jefferson County.

Dean cited the Hill-Burton program as an example of federal-state-local cooperation and said that nowhere in the United States has this cooperation been as outstanding and effective as in Alabama.

"Governors, the legislature, counties, municipalities, hospital authorities, and citizens from all walks of life have teamed up to make Alabama second to none in health facilities," he said. "The goal is now within reach."

The original Hill-Burton legislation, the Hospital Survey and Construction Act of 1946, was sponsored by Senator Lister Hill, Alabama, and Senator Harold Burton, Ohio.

Two Birmingham Gynecologists In 1972's 50-Year Club



DR. COLLIER



DR. BRANNON

Like J. Marion Sims, that great pioneering spirit in the division of medicine concerned with women's diseases, both subjects of this article on MASA's 1972 initiates into the 50-Year Club were born outside of Alabama.

Both saw their education interrupted by the call of their country to service in World War I. Both in addition to graduating in the same year began practice in Birmingham in the same year, 1924. And both will be found in the current MASA membership roster, under Jefferson County, with the letter "G" (for Gynecology) concluding their respective entries.

But there their paralleling likenesses end.

Robert Mitchell Brannon was born in Memphis, Tenn., on August 30, 1897—on the very day that the late Huey Long of Louisiana was celebrating his fourth birthday. In his early childhood, his family moved south to Greenville, Miss., where he spent his boyhood, going for his baccalaureate work to Mississippi State.

Young Brannon's study of medicine, begun at Washington University in 1917, interrupted by war, found him still determined on a career in medicine at war's end. But he changed schools, going to New Orleans and to Tulane, where he received his M. D. After two years of internship and residency at Lloyd Noland, he first entered general practice in Birmingham, later limiting that practice to gynecology. Until ill health forced his retirement he was also consultant to American Cast Iron Pipe Company's clinic.

In 1926 Dr. Brannon was married to Miss Lucile Moss of Hopkinsville, Ky., and four children were born to them, two of whom are now living.

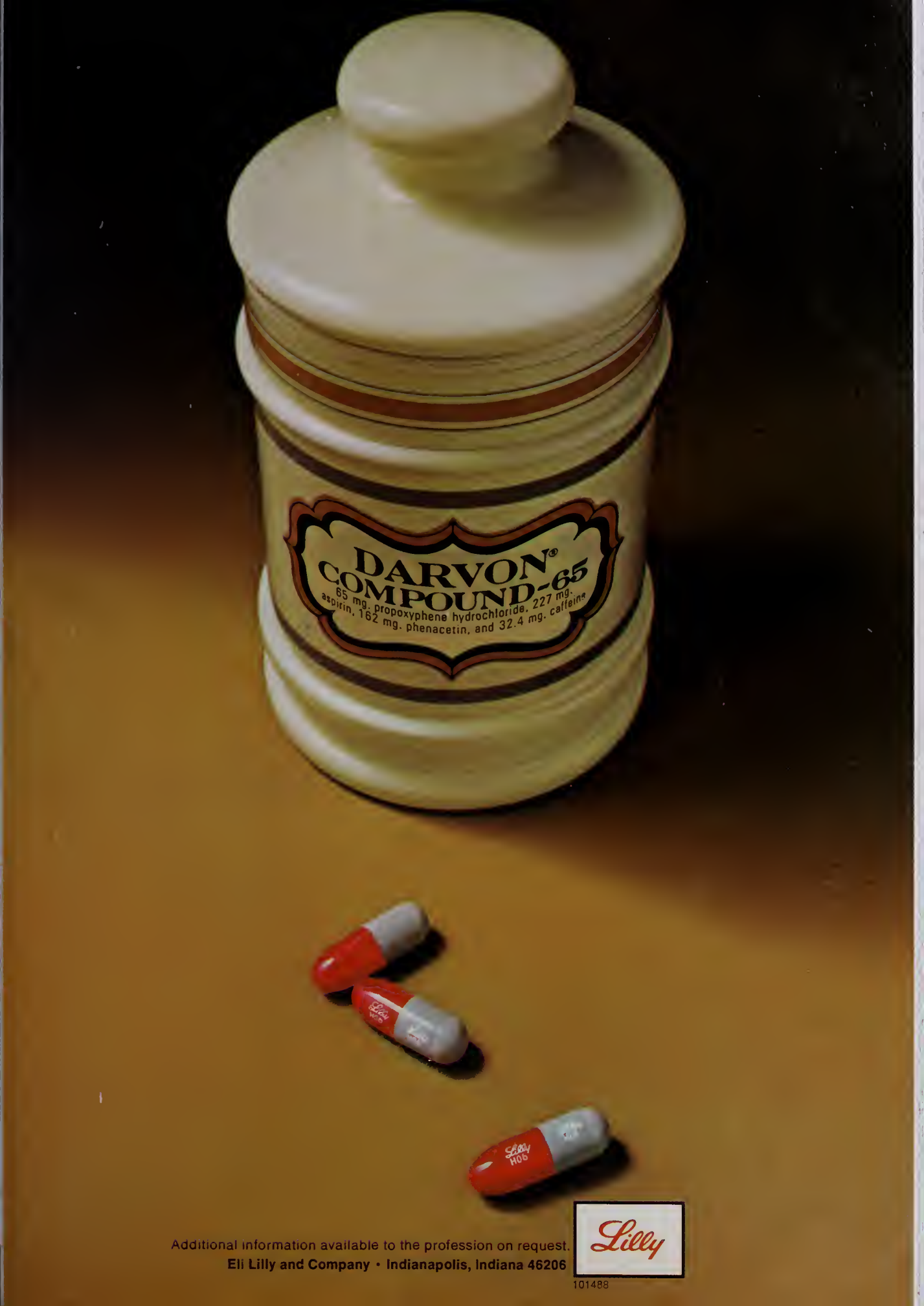
The other subject of today's article is Sidney Wixforth Collier, born in Galveston, Texas, June 16, 1894, in the midst of Grover Cleveland's second term as President of the United States. However his family moved north early in his life and he was educated in the public schools of Van Wert, Ohio, going on to Denison University, Granville, Ohio, for his baccalaureate, and earning his M. D. from the University of Minnesota School of Medicine.

After that war to make the world safe for democracy, and his completed work for his medical degree, Dr. Collier interned first in Minneapolis General Hospital and then in New Orleans Charity.

In the same year of his first venture into politics, 1924, Dr. Collier married a Birmingham girl, Margaret Marie Vliet, and they now have three daughters:—Patricia (Collier) Weber of Boulder, Colo., Margaret (Collier) Lowman of Birmingham, and Katherine (Collier) Ward of St. Louis, Mo.

In the early years of his practice, Dr. Collier included obstetrics in his specialties. But three years ago, after associating in practice with Dr. Edward A. Childs and Dr. J. Allen Lowman, the latter his son-in-law, he limited his own activity to office gynecology.

Both subjects of this article are members of the national, state and local medical societies. Dr. Brannon, however, was forced by ill health to retire completely from practice 14 years ago. Dr. Collier is on the staff of South Highland Infirmary, St. Vincents Hospital, and the Baptist medical clinics.

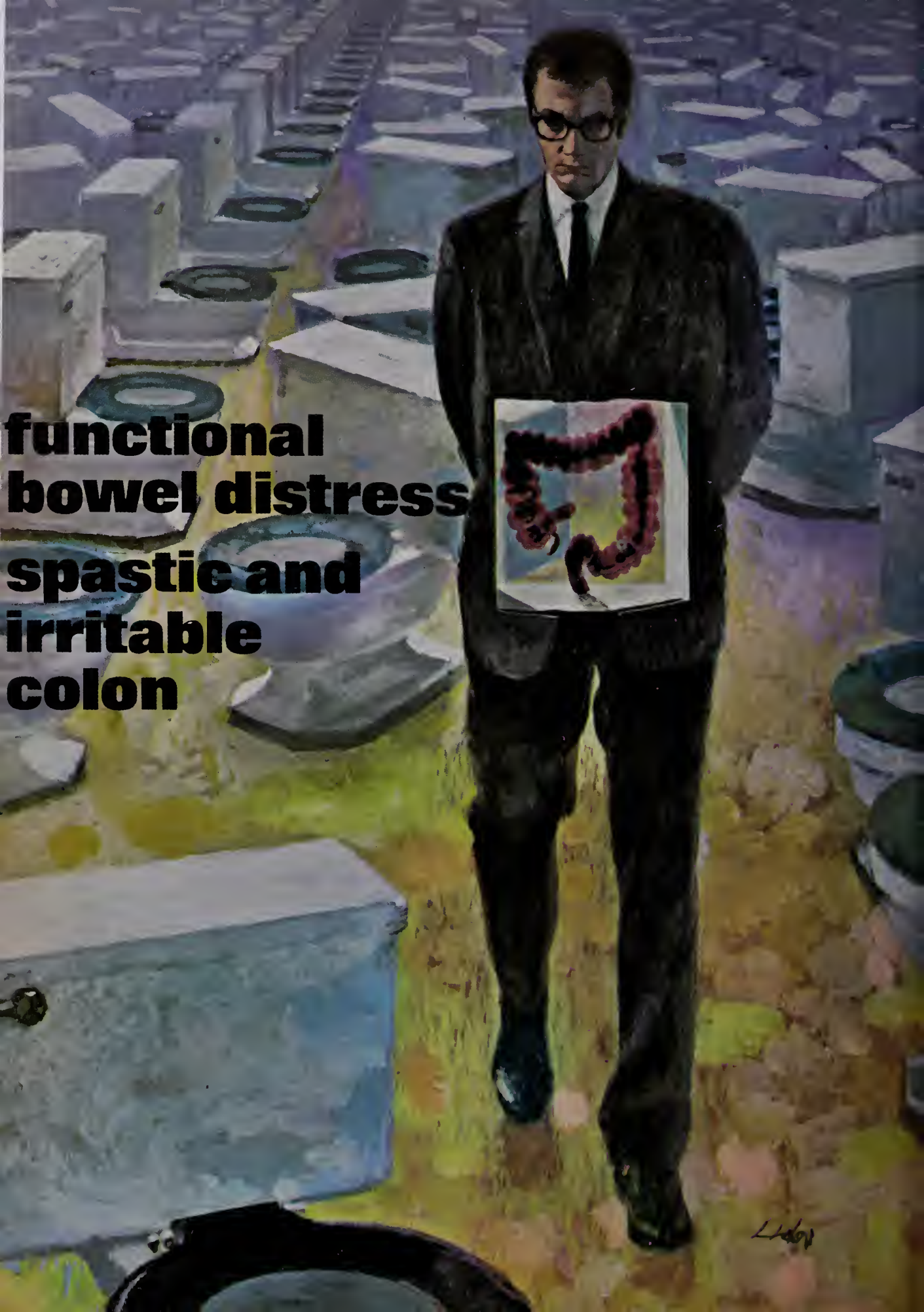


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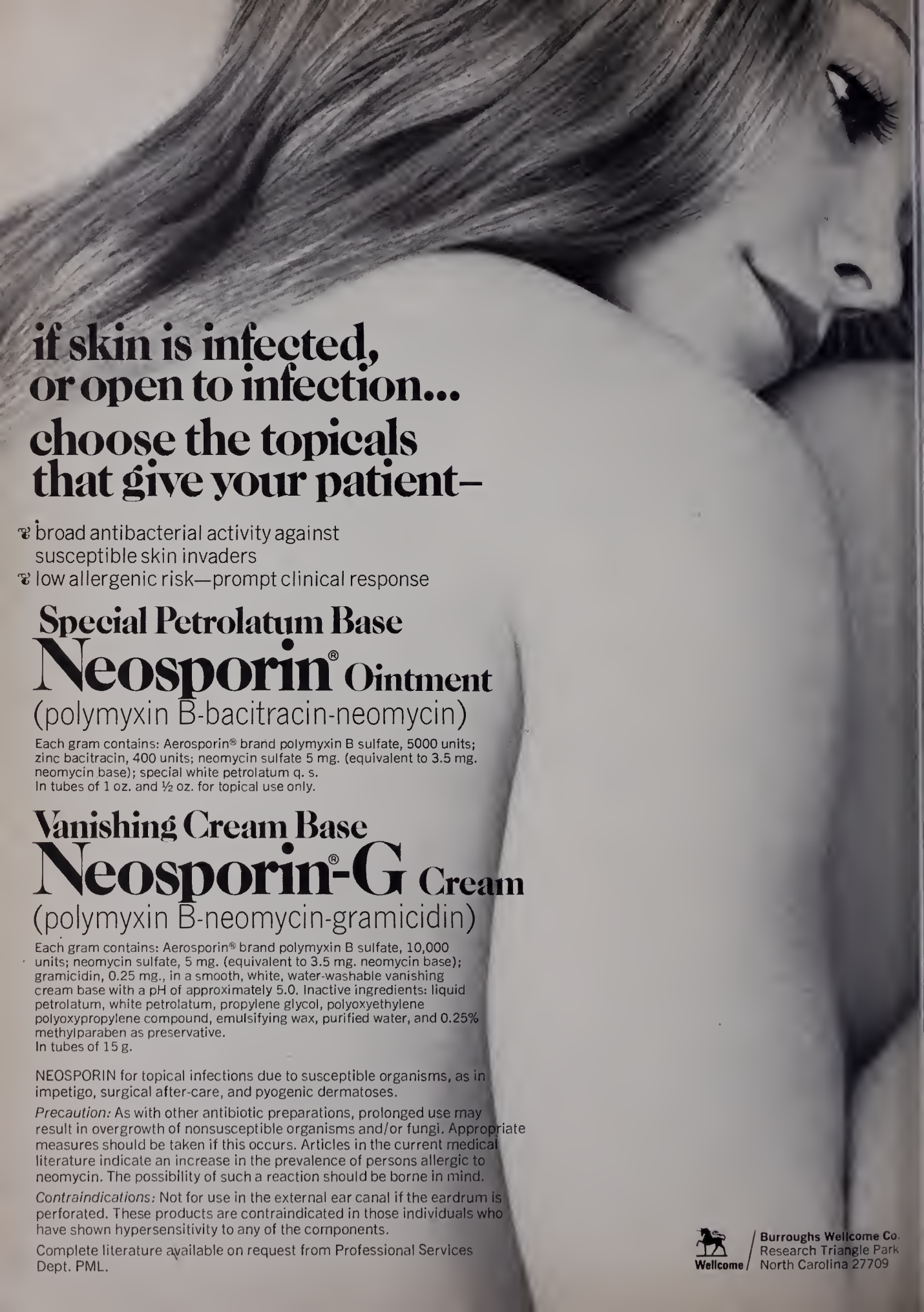
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Fathers and Sons in Medicine

Another Colley Trains To Practice Surgery In Troy

Three successive generations of Alabamians have worn the title and the name, Dr. James Oscar Colley, and the third of that name is currently interning in surgery at the University of Virginia at Charlottesville, planning to join his father in practice in Troy at a later date.

The original Dr. J. O. Colley was a D. D. rather than an M. D., a Baptist minister who for a fifth of a century was superintendent of the Alabama Baptist Children's Home. He was an alumnus of Howard College, the Baptist school in Birmingham.

His eldest son and namesake was born in Birmingham June 5, 1908, and 15 years later moved with the rest of his family to Troy, where the name has been prominently identified with the professional, civic, cultural and religious life of Pike County ever since.

Following in his father's footsteps, he went to Howard for his baccalaureate degree, and in becoming a member of the Sigma Nu fraternity set a precedent that would be followed by three younger brothers and his son.

Dr. James Oscar Colley, Jr., made his letter in football at Howard, attended the University of Alabama Medical School for two years, and was graduated with his M. D. degree from Tulane in 1934. He was a member of the Phi Chi Medical fraternity. Receiving his postgraduate training at Touro, New Orleans, he has practiced general surgery at Troy since 1936. He is on the Board of Trustees of the Alabama Baptist Children's Home, a deacon in Troy's First Baptist Church, and on the Board of Directors of the First Farmers and Merchants National Bank. Hobbies are hunting and fishing.

The junior Dr. Colley is married to the former Annette Folmar, daughter of the late



DRS. J. O. COLLEY III AND II

Helen (Henderson) and Emory Folmar of Troy, and they have five children. In addition to the third of that name, there are: Mrs. Larry Johnston, Troy; Mrs. Edward Telfair, Washington, D. C.; Jere Folmar Colley, Auburn offensive tackle, who will graduate next June; and the youngest, Miss Leah Colley, who will graduate from Marion Institute's high school in 1972. The Colleys also have five grandchildren.

James Oscar Colley III was born Aug. 29, 1941, in Troy, was captain of Troy High School's football team, and was chosen on the all-state football team. He was also on the varsity team of Baylor Military Academy from which he was graduated. With his baccalaureate degree from Howard, where he was a Sigma Nu and member of the O. D. K. honorary fraternity, he taught physics and chemistry in Birmingham for a year before going on to the University of Mississippi for his Master's degree. He received his M. D. degree from UAB Medical School last June. A member of the Phi Chi medical fraternity, he is presently interning at Virginia. This third Dr. J. O. Colley has traveled extensively in the United States and Europe.

His father is the eldest of four sons:—Judson, Matthew, and Dr. Jesse Hall Colley, who is in general practice in Troy.

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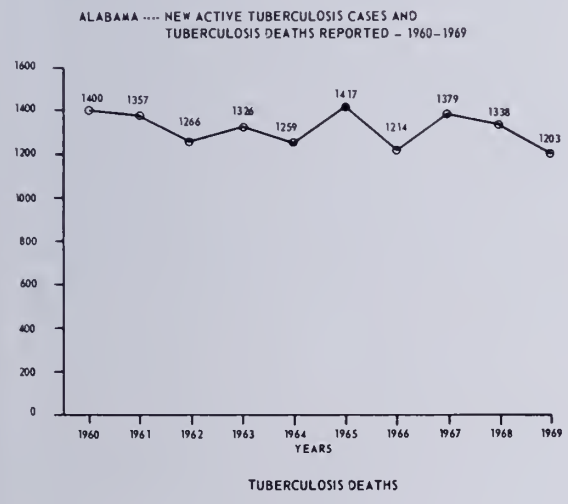
THE JOURNAL
of
THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA
Published Under the Auspices of the Board of Censors

Volume 41 November, 1971 Number 5

A Rationale For Tuberculosis Control

Frederick S. Wolf, M. D., Director
Bureau of Preventable Diseases
Alabama Department of Public Health

Alabama has consistently led the Nation in the rate per 100,000 of new active cases of tuberculosis diagnosed and presented for treatment annually. The necessity to accomplish a reduction in this rate of newly found cases of tuberculosis is one which is perhaps Alabama's greatest public health problem. (Graph No. 1) Were we to project



GRAPH NO. 1

into infinity a line showing the curve or base line or channel through which a number of new cases are projected, it would be found that without any medical support different from that of antiquity except the sanitizing of patients in tuberculosis hospi-

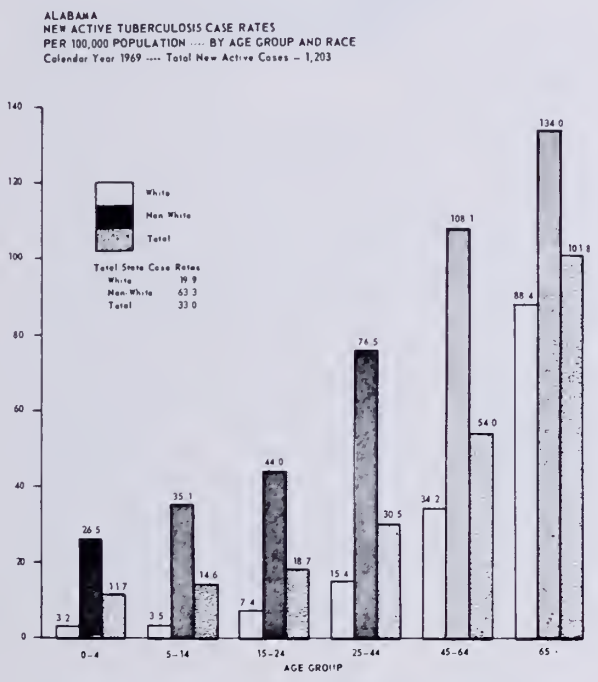
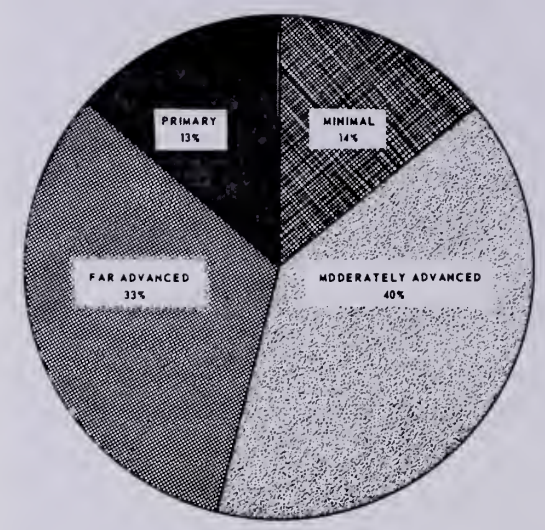


CHART NO. 1

tals, there would result perhaps a one per cent reduction in the new annual case rate. You can well appreciate that this is not an acceptable number. Not only is this a high annual rate, but at the time of diagnosis by Alabama physicians, 70 odd per cent of the newly reported cases are moderately or far advanced disease. (Chart No. 1) An analysis of 1969 case rate by age and race further illustrates the diagnostic problem. The slow, insidious progression of the disease in the absence of a high physician index of sus-

Presented to the Montgomery County Medical Society, November 2, 1970.

ALABAMA
PERCENT DISTRIBUTION OF NEW ACTIVE TUBERCULOSIS CASES
BY EXTENT OF THE DISEASE – 1969



Primary 135 cases ···· 13%
Minimal 148 cases ···· 14%
Moderately Advanced 410 cases ···· 40%
For Advanced 341 cases ···· 33%

Excluding "Extent not specified" and "Nonpulmonary" cases.

CHART NO. 2

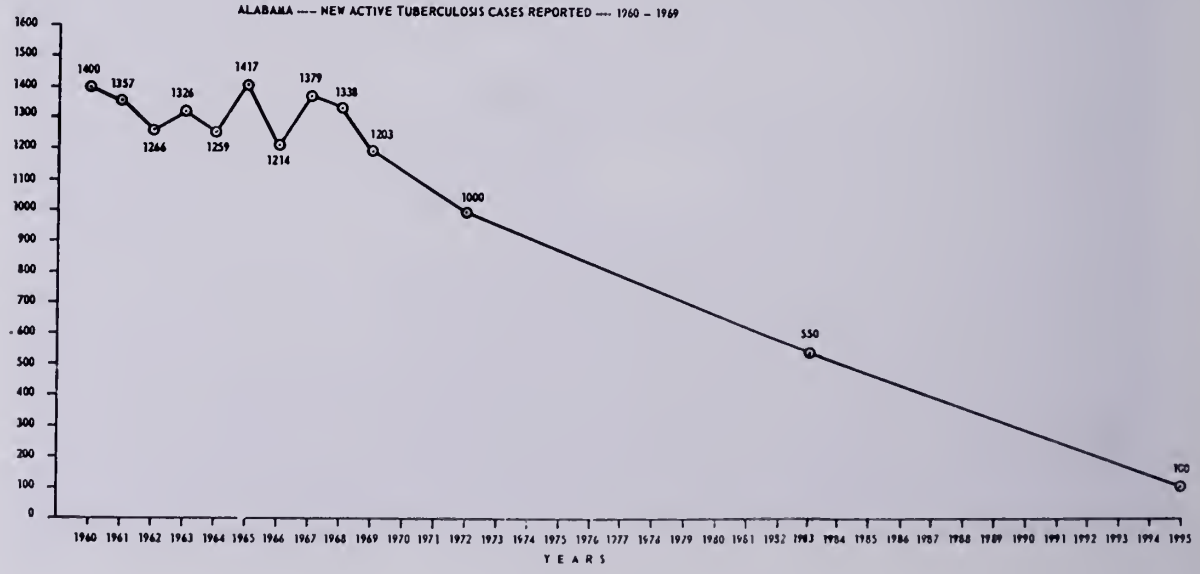
picion could account for the lateness of diagnosis. (Chart No. 2)

For Alabama in a 25-year period to reduce its new active case rate to a level of only 100 new active cases requires a ten per cent annual compounded rate of reduction. The problem is to do it. This projection is shown in graphic form. (Graph No. 2) In 1969 we exceeded the ten per cent rate. In 1970 we will be most fortunate if we achieve a five per cent reduction in 1970 as compared with 1969.

The Alabama program calls for the identification of the positive tuberculin reactor and, having identified this individual, to assure that he or she receives prophylactic medication for a period of one year. There is, of course, the necessity for follow-up of these patients for a longer period than this.

What are the number of people at risk of developing active tuberculous disease? The tuberculin testing program in children shows that for the school enterer less than one-half of one per cent of the population reacts to intradermal tuberculin. However, when we reach the older age group—60 and above, the rate is about 18 per cent so that the percentage is a cumulative number and is reasonably constant for a cohort entering the testing program at any age level. On this basis, we can safely say that there are in Alabama in the range of 200,000 people at risk of developing active tuberculosis.

Literature is replete with references demonstrating time and time again that it is only the tuberculin positive individual who may become an active case of tuberculous disease. Is it possible to effectively use prophylaxis and reduce the tuberculin reactor rate? This has been beautifully demonstrated over a period of 20 years by the work of Ferebee[1] Comstock,[2] and others in their Alaskan and U. S. demonstrations. In this time frame of 20 years, the tuberculin reactor rate was reduced from almost 100 per cent to less than



GRAPH NO. 2

one per cent and, in fact, today is less than Alabama's rate for six-year-old children. Paralleling this, the new active case rate for all age groups is less than Alabama's. (Table No. 1)

PREVALENCE OF TUBERCULOSIS INFECTION AT SIX YEARS OF AGE

YUKON-KUSKOKWIM DELTA, ALASKA

Year	Percent Tuberculin Positive
1950	90.0
1957	74.2
1960	33.1
1964	5.1
1967	1.9
1969	Less Than 1.0*

*Estimate furnished by NCDC, Tuberculosis Branch, Atlanta, Georgia

TABLE NO. 1

How valid is the tuberculin test? Animal work and studies within human populations have adequately confirmed the validity of this test. The complexity of the tubercle bacillus, its high protein constituent percentage, is the reason what we are testing with PPD tuberculin is an allergic response and, as in all allergies, it rises and falls. Our own work in this period of time has demonstrated that the tuberculin reaction begins to diminish in older people until a form of anergy is reached, so that in reading tuberculin reactions in older people we accept a somewhat smaller reading, 6 mm, instead of 10 mm as the cut-off point for our routine testing.

Does the tuberculin testing sensitize an individual? And the answer is an unequivocal, "No." The amount of tubercle protein in any single dose used in tuberculin testing will not sensitize. Recently in discussing this with Dr. Smitz at Southern Research, the statement was made that not in his entire career in mammalian tuberculosis has this sensitization been produced.

Prophylactic Isoniazid has now been used in all of the 50 States. The work of Ferrebee, Comstock, and others has been extended to where there are now a total of 75,000 tuberculin reactors on prophylactic Isoniazid and 75,000 on placebo. This next series of tables (Table Nos. 2 and 3) presents the story for a portion of this group. The percentage of reduction in Table No. 3 is important. Obviously we would expect a lesser reduction in previously treated active patients. The next two graphs (Graphs Nos. 3 and 4) are cumulative results extended over a limited period.

The effectiveness of Isoniazid prophylaxis

USPHS TRIALS OF ISONIAZID PROPHYLAXIS

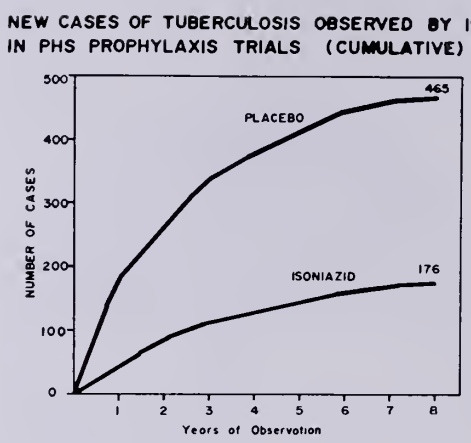
TRIAL	SITES	YEAR BEGUN	PARTICIPANTS
TOTAL			67,546
Primary Tuberculosis	32	1955	2,750
Contacts			
Of Known Cases	5	1956	2,814
Of New Cases	39	1957	25,033
Silicotics	4	1957	1,097
Mental Patients	37	1957	25,210
Alaskan Villagers	28	1958	6,064
Inactive Lesions	31	1960	4,578

TABLE NO. 2

PULMONARY & EXTRAPULMONARY TUBERCULOSIS CASES DURING THE TREATMENT YEAR AMONG PARTICIPANTS IN SIX PHS PROPHYLAXIS TRIALS

	PLACEBO		ISONIAZID		Percent Reduction
	Participants	Cases	Participants	Cases	
Primary Tuberculosis	1,356	31	1,394	2	94
Alaskan Villagers	3,017	46	3,047	16	65
Contacts	13,945	82	13,902	20	76
Mental Patients					
Schizophrenics	4,620	4	4,751	2	56
All Others	7,706	17	8,133	1	95
Healed Lesions					
Never Active	797	13	785	5	61
Previously Active	1,487	17	1,509	14	18

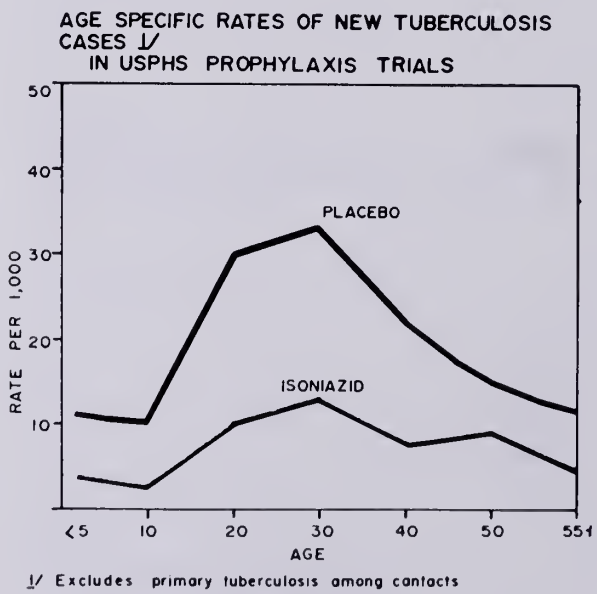
TABLE NO. 3



GRAPH NO. 3

does not diminish with the age of the individual. In all of the data presented in this series, dosage and acceptance by the patient was reasonably continuous for at least one full year—12 months. Expert opinion is that had the individuals in this study group accepted prophylactic medication for a full year, the number of avoided cases of active tuberculosis would reach 100 per cent.

Now a word or two about the blood level obtained by the use of prophylactic medicine. It is only necessary to call your attention on Graph No. 5 to the line representing a "Bacteriostatic" level. There is no question then that adequate blood and tissue levels



GRAPH NO. 4

are obtained and maintained by the recommended dosage of 300 mg of Isoniazid taken once each day.

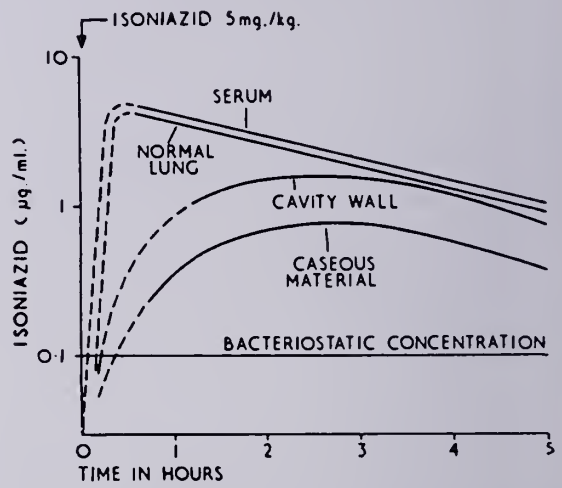


FIG. 2.—Isoniazid content of serum, normal lung tissue, cavity wall, and caseous material in resected human material after an intramuscular dose of isoniazid 5 mg./kg. body weight. Data redrawn from Bartmann and Freise (1963).

GRAPH NO. 5

Now another question that occurs is the potential development of resistant strains and attention to the top line of Table No. 4 gives you numbers which have been found in various therapeutic levels of Isoniazid. And again the development of resistant strains is infinitesimal. This is borne out by the V. A. Armed Forces continuing study which shows no change from year to year in the percentage of resistant strains found in individuals with active disease under medication. The same experience is recorded in our laboratory where we are doing some 70,000 tuberculosis cultures a year. The percentage is not changing with the increased utilization of Isoniazid. Now the action of Isoniazid on the tubercle bacillus is interesting. It is neither bactericidal nor bacteriostatic, but it does interfere with the capability of the organism to reproduce. Recently a paper presented by a French pathologist, who over a long period of time has been reviewing pathologic material produced by two French thoracic surgeons, has come up with some interesting observations. This physician demonstrated that in lung tissue

obtained by lobectomy he was finding negative cultures consistently, but when the tissue was stained and studied under the scope, whole tubercle bacilli were seen. They stained about the same as they always do in an acid-fast stain and there was also present granular material which was acidophilic, as well as the Y form. But again in all of this material no viable organisms were ever demonstrated by culture.

There may be a question in some minds about the presence of a positive tuberculin reaction, that is, 10 mm or greater, and a reported AP film, "No lesion found. Negative X-ray," whatever the radiologist uses in that particular clinic. Long years ago, Pinner and Medlar in New York demonstrated that some time before radiologically visible lesions could be demonstrated, cessation of a tuberculous focus had already occurred with rupture into the pulmonary tree. We have seen somewhat the same thing in our own testing program where, as an example, the Public Health Nurse in Henry County skin tested a school where there had been a mini-epidemic of tuberculosis. Seven children were found with positive tuberculin reactions. These seven were each given a sputum cup. The X-ray reports came back before the laboratory results had been completed. The X-rays gave four of these children the so-called negative X-ray and three with visible lesions. The laboratory reports came back with seven positives. We had seven positives on a random sampling—just to a child, "Give me a spit." From such things as this, we are more inclined to accept a positive tuberculin as evidence of infection at some time or another than we will a negative X-ray.

Some of you may have heard that recently a skin testing program was introduced to a hospital staff. Of the 60 individuals tested, seven were tuberculin positive, that is, 10 mm or greater. Two of the individuals had reactions of 25 mm and 35 mm, respectively. The individual with 25 mm did have considerable erythema, was quite complaining, and reported to the emergency room where he was admitted to the hospital. In nearly a million tuberculin tests over the past two and one-half years, we have, in fact, seen some reactions. These are not disturbing to us although they may alarm the patient. They respond quite simply to cold and to a couple of days of benign neglect. I think the individual was unduly perturbed but this, of course, is no cause for discontinuing such a program. Perhaps in this individual there is a sensitivity to phenol or one of its derivatives, one of which is used as a preservative for the tuberculin. These are no different than the rather peculiar reactions we see every once in a while with some of the immunizing agents. What it does mean to you as physicians and to the patient is that this individual now has a reason for the protection of Isoniazid in the event that he should a year from now after this course of prophylaxis come to your attention and require the use of steroids or develop some debilitating disease which could cause a flare-up of an up-to-this-point arrested tuberculous focus.

We urge your support of this prophylactic program in order that we may over many years protect our school children from the mini-epidemics of tuberculosis, which have occurred annually in the history of the Health Department, and eventually achieve a relative standing within the listing of States that would show Alabama well down the line instead of at the top.

Treatment of tuberculosis patients requires, and now I am talking about active disease, the use of three anti-microbial drugs, not one, not two, but three--aggressive medication with regular sputum check-ups and with regular interpretation of the X-ray film. Only in this way can you be assured that the patient is making successful progress. In Alabama's tuberculosis hospitals now, 52 per cent of the patients will become bacteriologically negative and remain negative throughout their hospital stay, with a culture taken at the 63rd day—52 per cent

with culture at 63 days. This is compatible with the results obtained in other institutions treating tuberculosis. As a result, the average hospital stay in our tuberculosis hospitals is about 180 days with a median of 140. This median is brought about by individuals who either do not have tuberculosis on close observation and many laboratory cultures or decides to leave against medical advice. Because of the success of treatment today, there were on September 30th, 610 patients in tuberculosis hospital beds. This is a considerable change in three years, or should I say from 1965, when the waiting list for admission to tuberculosis hospitals began to evaporate. During 1967 there was a waiting list only in one hospital when every other bed was occupied. The presence of strong out-patient clinics throughout the State is a further reason for the reduction in the hospital census. Hospital physicians know that the tuberculous patient will be seen by a doctor in his home community and that the physician seeing this patient at regular intervals has over a period of years developed an unusual expertise and knowledge of tuberculosis so that the on-going follow-up through the critical three years after release from hospital is well done, and the patient then can expect a lifetime free of active tuberculosis.

We can do it, but we need an awful lot of help.

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Beware The Bees!

More people die from the effects of bee stings and stings from members of the bee family than from the venom of snakes and spiders combined. The insect group—including bees, wasps, hornets and ants—accounted for 50 per cent of 460 deaths from bites and stings observed during a ten-year study, reports Family Safety Magazine.

A bee sting usually leaves nothing more than a painful swelling which disappears within hours. But the number of people who suffer allergic reactions to this kind of bite is increasing. An allergic reaction to insect venom can vary from minor itching all the way to death. Symptoms may range from dizziness to headaches, abdominal cramps and extreme nausea. Breathing difficulties, hives and swelling in an area other than the location of the sting are warning signs of allergy. Anyone with such symptoms after an insect sting should be taken to a physician or hospital emergency room immediately.

The first allergic reaction is not often fatal, but provides a definite warning. Once a person has been sensitized to the venom of one member of this insect group, he will be allergic to the sting of all.

In order to discourage the attention of bees:

- Avoid strong perfumes and hair sprays, hair tonics and sun tan lotion. Sweet smells, especially floral fragrances, attract bees;
- Wear white or green, khaki or other subdued colors when participating in outdoor activities, because brightly colored clothing, flowery prints and black or dark colors seem to anger insects;
- Bees and other insects are attracted by uncovered food, so keep food covered and do not leave garbage in uncovered containers;
- When a bee is near, avoid swift movements of the arms and body. And if a bee lights on you, do not slap it as you would a fly or mosquito. If the bee is not threatened, chances are it will not sting.

—Illinois Health Messenger.

The Negative Tuberculin Test

Dr. Gerard Wijsmuller
Rockville, Maryland

With the rapid decrease in the tuberculosis infection rates,[1] more people of any age react negatively to the tuberculin test. The tuberculosis infection rate nationally is estimated to be less than one per thousand per year. Tuberculin negatives outnumber positives five to one.

In tuberculosis control, the picture is one of rapid change. We are no longer satisfied with the detection, isolation and treatment of patients, but have begun to treat the infected *before* they develop overt clinical disease. As a result of this change in attitude, the finding of a positive tuberculin test is not merely followed by the taking of an X-ray, but a negative X-ray is followed by the prescription of isoniazid, and this event marks the beginning of a full year of supervised medication. Meanwhile, the finding of a negative tuberculin test results in the dismissal of the examinee with the assurance that he has not been infected with tubercle bacilli and that neither X-ray, follow-up nor preventive treatment is indicated. With the patient relieved by these assurances and on his way, the question must be asked: "How good are these assurances of minimal risk and no need for further examination or treatment?" The answer is "that depends."

There are many reasons why a tuberculin test which should be positive yields a negative result. It will be the purpose of this presentation to focus attention on the *Negative Tuberculin Test.*

Reasons why people have a negative tuberculin test will be discussed under four headings, namely,

1. Those related to the person tested
2. Those related to the tuberculin used in the test
3. Those related to the administration of the tuberculin test
4. Those related to the interpretation of the tuberculin test.

1. Negative tests explained by factors related to the person tested.

If a positive tuberculin test is taken as evidence of the presence of living tubercle bacilli somewhere in the tissues of the person tested, a negative test should be taken as evidence of the absence of living tubercle bacilli in the tissues of the person tested. If the test is found to be negative despite the presence of living organisms it may be called a false negative test.

The vast majority of people who do not react to the tuberculin test do so because they have never been infected with tubercle bacilli. However, it has been reported that people who have been infected recently may become non-reactors as a result of preventive treatment with isoniazid.[2] In this connection it should be emphasized that the results of large scale studies on isoniazid prophylaxis conducted by the U. S. Public Health Service indicate that most tuberculin reactors retain their sensitivity despite treatement for a full year with therapeutic doses of isoniazid.[3]

Important from an epidemiological point of view are circumstances which result in a

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temporary loss of sensitivity. Some of these causes have recently been reviewed.[4] They include: generalized *disease of the lymphatic system* like sarcoid, amyloidosis, lymphomas and leucaemias, *acute infections*[5] among which we may now include *vaccinations with certain live (viral) vaccines.*[6] It is of practical significance to remember that certain vaccinations may temporarily suppress tuberculin sensitivity. For this reason, tuberculin skin tests should be given before rather than after measles vaccination.

It is possible that the temporary loss of sensitivity due to whatever cause is associated with a temporary reduction in resistance to tuberculosis. This has been documented for the suppression of sensitivity through *treatment with cortisone.*[7] Candidates for cortisone treatment must therefore be tuberculin tested before treatment is initiated and isoniazid given prophylactically to all tuberculin reactors receiving corticosteroids.[8]

Finally, and from a numerical point of view more important, is the apparent loss of *sensitivity to tuberculin among the aged.* In most studies reporting on the sensitivity to tuberculin by age, the prevalence of reactors increases up to the age of 55-65. However, thereafter the prevalence decreases. It is not clear whether this decrease reflects an increase in the number of burned out infections in which there are no longer any living tubercle bacilli in the body, or whether the decrease must be viewed as resulting from senile changes in the skin, a failing immune mechanism, a change in the development of the tuberculin test or a combination of these factors. Observations made by our group during a recent study suggest that the tuberculin test develops more slowly in the aged and that the tuberculin reactor rate among people over 60 would have been higher had the reactions been read at 72 or even 96 hours rather than at 48 hours after testing.[9]

2. *Negative tuberculin tests resulting from factors related to the tuberculin used for testing.*

Important causes of negative tests, directly related to the tuberculin used for testing are: *improper handling* of the dilutions, preparation of *wrong dilutions, chemical denaturation* of the tuberculin, *contamination* of the solution, and loss of potency through *adsorption* of tuberculoprotein to the wall of the container. Tuberculin dilutions are somewhat sensitive to heat, and quite *sensitive to sunlight.*[10] Never leave a tuberculin vial in a window sill exposed to direct sunlight; it will ruin the biological activity. Tuberculin solutions must be protected from sunlight and from heat, and this can best be done by storing them in a refrigerator.

Almost all tuberculin dilutions contain ¼ to ½ per cent of phenol to prevent or at least suppress the multiplication of contaminants that might be introduced during use. Storage of opened vials in the refrigerator reduces multiplication of possible contaminants.

Tuberculin should never be diluted in saline or in distilled water but only in specially formulated buffers. Diluting tuberculin with saline or distilled water may result in chemical denaturation of the tuberculoprotein with a consequent loss of biological activity. This is particularly important for those who purchase second strength tuberculin (250 TU/.1 ml) for economy and dilute it to an intermediate strength (5 TU/.1 ml).

As soon as a container is filled with a tuberculin dilution, some of the active principle will be adsorbed[11] to the inner surface of the container. As a result, the amount of tuberculin in actual solution decreases until, after approximately 24 hours, the solution becomes stabilized at a lower level of potency.[12] The degree of adsorption varies from product to product and depends to a considerable degree on the surface area available for adsorption. If the ampoule holding the solution is only partially filled, fewer ml of tuberculin are exposed to the inner

surface than if the same ampoule is completely filled. As a result, the amount of tuberculin lost through adsorption is larger in partially filled ampoules.[11] The same reasoning may be applied if a tuberculin dilution is put in vials of different size. Because of the content to inner surface ratio, loss of potency due to adsorption is smaller in large, and larger in small vials.

Adsorption in the tuberculin vial is not much of a practical problem for those who receive tuberculin in a ready-for-use form. The adsorption has already occurred when the dilution is received. However, those who prepare their own dilutions can use them immediately after preparation before any adsorption has taken place, or some time later when adsorption has decreased the potency of the dilution.

In order to evaluate the practical significance of this problem, we compared, in the same people, the reactions to a commercial PPD prepared fresh, and to the same tuberculin stored in the refrigerator for two weeks.[13] All participants received in addition a test containing 5 TU of PPD-S. It was found that the freshly prepared solution elicited reactions which were comparable in size to the reaction to PPD-S. However, the dilution stored in the refrigerator for two weeks was much weaker. In fact, even a dilution of the same material in the 10 TU strength, stored for 2 weeks in the refrigerator, elicited reactions that were much smaller than the reaction to the freshly prepared dilution of 5 TU. Clearly, the loss in potency due to adsorption in this experiment was in excess of 50 per cent.

To overcome the very real and serious problems resulting from the adsorption of tuberculin to glass and plastic, adjuvants or "stabilizers" are used which reduce adsorption.[14] Of the various "stabilizers" that have been recommended, Tween-80, a detergent, is extremely effective. Even in concentrations as low as 5 ppm (parts per million), this material exerts a considerable effect. It is now used in at least two tuberculins PPD presently distributed in the U. S. A. It is expected that in the future most diluents for tuberculin PPD will contain either a small amount of Tween-80 or another stablizing agent.

3. Defects in the method of administering tuberculin as a cause of a negative test.

The most common cause of a false negative reaction is the injection of a smaller dose than intended. This generalization applies to all types of tuberculin tests, Tine, Heaff, Pirquet, Mantoux or jetinjector. In the Tine test, a number of prongs on which a tuberculin solution has been dried are inserted into the skin. This dried tuberculin can only induce a reaction if it is dissolved, and the only material in which it can be dissolved is the tissue fluid. Therefore the prongs must not only penetrate the skin deeply enough but must also be kept in the skin long enough for the dried tuberculin to be dissolved in the tissue fluids. With the Heaff test, the problem is less complicated because the tuberculin is used in liquid rather than in dried form. The only condition is that the prongs penetrate the skin deeply enough. The same is true for the Pirquet test.

A now popular modification of the intracutaneous injection of tuberculin according to Mantoux is by jetinjector. Of this technique, the WHO Chronicle recently remarked,[15] "Experience in the use of the jet guns suggests increasingly that they are not being used properly, or that a proper way of using them has not yet been found. This is of practical importance as one of the advantages initially ascribed to this technique was its ease of handling. It remains to be discovered how the instruments should be used to simulate as closely as possible the needle injection technique." Our experience and that of others supports this statement. In a recent PHS study[16] PPD-S and PPD-B solutions were injected in the same persons according to the Mantoux and the jetinjection technique. The amount of fluid actually

injected was estimated on the basis of the size of the weal resulting from these injections. The average weal to the Mantoux test was 8.8 mm, to the jetinjector test only half that size, or 4.0 mm. Supporting the interpretation that this difference in weal size reflects the difference in the amount of tuberculin actually injected was the difference in the frequency of positive reactions to the tests given with the two techniques. At a criterion of 10 mm or more, 33 per cent of those tested reacted to PPD-S given by Mantoux but only 25 per cent reacted to the same dilution injected by the jetinjector. For PPD-B, the difference was even greater, 51 and 23 per cent reacting to Mantoux and jetinjector respectively. The problem with the jetinjector is, in our experience, twofold. Firstly, it tends to inject too little. Secondly, the amount actually injected is unpredictable. As a consequence, the variation from test to test is considerable.

While it is possible to do a better job with the Mantoux than with the jetinjector, it must be admitted that the Mantoux technique requires practical skill that can only be maintained if the tester gives tests frequently.

Under special circumstances, false negative tuberculin reactions to the Mantoux test may result from adsorption of tuberculoprotein in the syringe used for testing. When many skin tests have to be given according to the Mantoux technique using single dose disposable syringes, one is tempted to fill a large number of syringes well ahead of the time of testing. Sometimes syringes are filled hours before use, sometimes the evening before use, and we have even heard of one instance in which the syringes were filled on Friday afternoon for use on Monday morning.

To investigate the significance of a prolonged interval in time between filling of the syringe and giving of the injection, we compared the reaction to a tuberculin dilution injected with disposable syringes filled just before use with the reaction to the same tuberculin dilution given with the same type syringe filled the evening fefore use.[16] As expected, the reactions to tests given with tuberculin syringes filled the night before use were appreciably smaller than the reaction to tests given with syringes used immediately after being filled.

4. *Negative test results as a consequence of the interpretation of the tuberculin reaction.*

It is not always appreciated that the interpretation of the tuberculin test may vary considerably from one test reader to another.[17] Inexperienced readers tend to read the reactions smaller than experienced ones, and their readings tend to show more terminal digit preference. Thus one often finds an excess of reactions of five, ten, fifteen, etc. mm induration, and the distribution of reactions shows irregular peaks at the preferred values.

Another interesting *bias in reading* relates to the object of the testing program and the personal conviction of the reader regarding this object. If, for example, the tuberculin test is used to select people for vaccination with BCG, the distribution of reactions may have an excess of reactions just below or just above the vaccination criterion depending upon whether the reader believes that vaccination is desirable or undesirable. Likewise, if the test is used to select people for X-ray and/or isoniazid prophylaxis, readings may be biased pro or con. The bias may be accentuated if the person reading the test also has to suffer the consequences of the reading, that is, has to supervise the year of isoniazid medication.

An interesting form of bias was observed some time ago in a study involving mental patients who had received two tuberculin tests, one in each arm.[18] The tests were read simultaneously and the readers knew that the tests contained different materials. Cross-tabulation of the test results revealed a lack of reactions of equal size. This suggests that since the readers knew that the tests were

different, they expected that the reactions should be different too. Conceivably, an excess of reactions of equal size would have been observed if the readers had been told that the tests that they were reading were duplicate tests. These examples show how distributions of reactions and correlation tables can be used to detect various forms of reader bias.

Reader bias may be avoided or at least minimized through:

a. The use of a caliper instead of a ruler to measure the size of the reaction. This device permits the size of the induration to be estimated first and to be measured next. As a result, terminal digit preference is largely eliminated.

b. Multiple reading. The reading of each reaction by two independent readers rather than just one will diminish the effect of individual reader bias since it is unlikely that both readers have the same preference. The sum, or the average of the two readings is then used as a best estimate of the size of the reaction.

c. Detachment. If at all possible the person reading the tests should not be involved in the consequences of his reading nor know how his test readings affect the management of the person tested.

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Hobbies To Fill A Doctor's Leisure

No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard.

—Sir William Osler, 1909

Salvaging Historic Places, This MD's Enthusiasm

Hunting—everything from quail to caribou, from dove to deer— may be his casual and confessed hobby, but ever since an injury forced this Fort Payne doctor from the skiing slopes and surfaces, he has turned much enthusiasm to tourism.

And in the metamorphosis, his town and his state have benefitted.

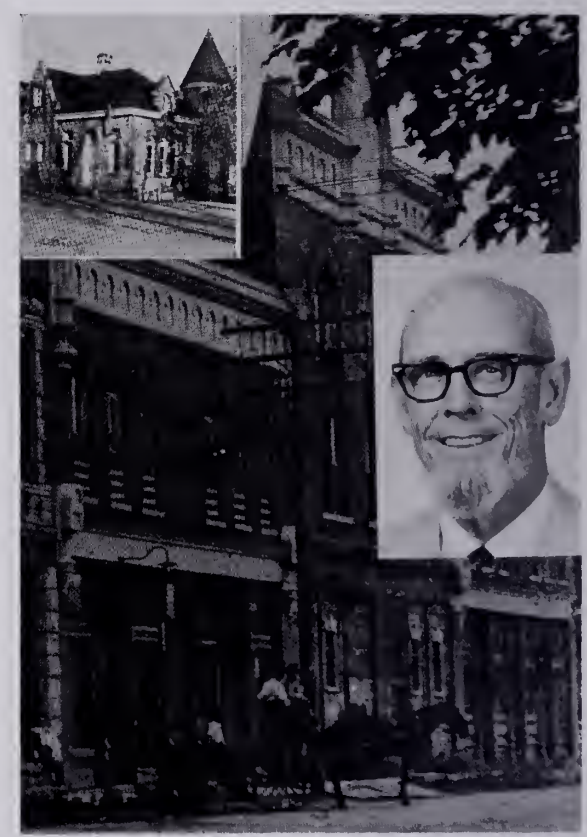
George Irving Weatherly, Jr., was born in Albertville, in Marshall County. At the age of 4 he and his family moved over to Fort Payne, in DeKalb county, where he was graduated from high school at the age of 16.

The future doctor attended Marion Military Institute, received his BS and MD degrees at Tulane, and served his residency at Baroness Erlanger Hospital, Chattanooga. He volunteered for service in World War II and served five years with the 33rd Division, half of that time in the South Pacific.

For a quarter of a century he has been in general practice in Fort Payne and is now a Diplomate of the American Board of Family Practice. He and Mrs. Weatherly have three children, a son now serving in Saigon, two daughters, and a grandson. All of them share the doctor's enthusiasm for the "rugged life."

The walls of his den reflect one hobby, covered with numerous mounts, some spilling over into the living room:—dove, quail, duck, geese, deer, antelope, moose, Dall sheep,

(Continued on Page 363)



PROJECTS AND THE PROJECTOR.—George Irving Weatherly, Jr., M. D., is in General Practice when it comes to his vocation, but Restoration and Preservation of historic landmarks when it comes to his avocation . . . The Fort Payne Opera House, built more than four score years ago, had its official reopening last May 3rd. In the upper left corner is the ancient railway station, still in service but now a historic landmark . . . Inset right is Dr. Weatherly himself.



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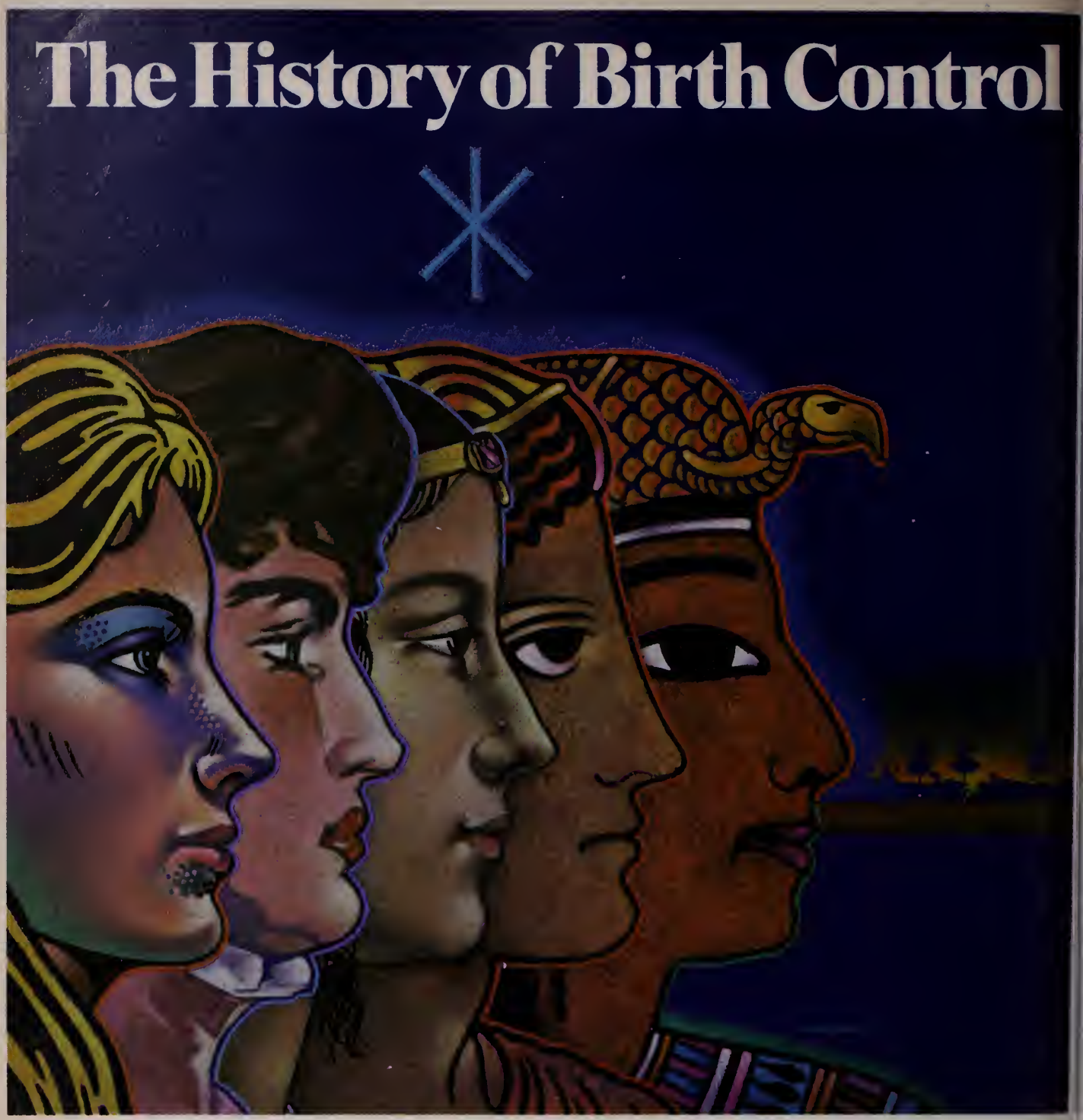
Beef Broth	22	Vegetable	68
Consommé	29	Tomato	69
Chicken with Rice	43	Cream of Asparagus	70
Chicken Gumbo	48	Cream of Chicken	76
Chicken Noodle	54	Cream of Mushroom	115
Cream of Potato	58	Green Pea	116
Chicken Vegetable	60	Cream of Shrimp (Frozen)	132
Vegetable Beef	66	Bean with Bacon	133

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The History of Birth Control



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In ancient Egypt they used pessaries of crocodile dung or tried to clog the motile sperm with honey and a gumlike substance. The women of Islam used tampons of pomegranate pulp and rock salt. In Japan they burned little balls of "burning grass" on the *mons veneris* or, more practically, tried to cover the mouth of the uterus with disks of oiled bamboo tissue paper. In the 18th Century in France upper-class women rediscovered the vaginal sponge, a device mentioned in sources as old as the Talmud.

It may seem now that such advances as oral contraception and the IUD have freed women from this often fruitless search and consequent suffering, but there are millions of women in the United States and elsewhere who have less knowledge of, and less recourse to, contraceptic than Egyptian women of the Twelfth Dynasty. Nothing is more urgent to all of us than to bring them help. We cannot long support the ecologic pressures of an additional 70 million Earth inhabitants each year.

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Demulen (for its low estrogen and Searle's progestin) and Ovulen (with its wide physician and patient acceptance) offer almost complete contraceptive effectiveness and a low incidence of side effects—both with a choice of pill-taking schedules...simple "Sunday-starting" and patient-proof Compack® tablet dispensers.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study of Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be delermined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X, thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values, metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. 13:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. **4.** Sartwell, P. E., Masi, A. T., Arthes, F. G., Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. 90:365-380 (Nov.) 1969.

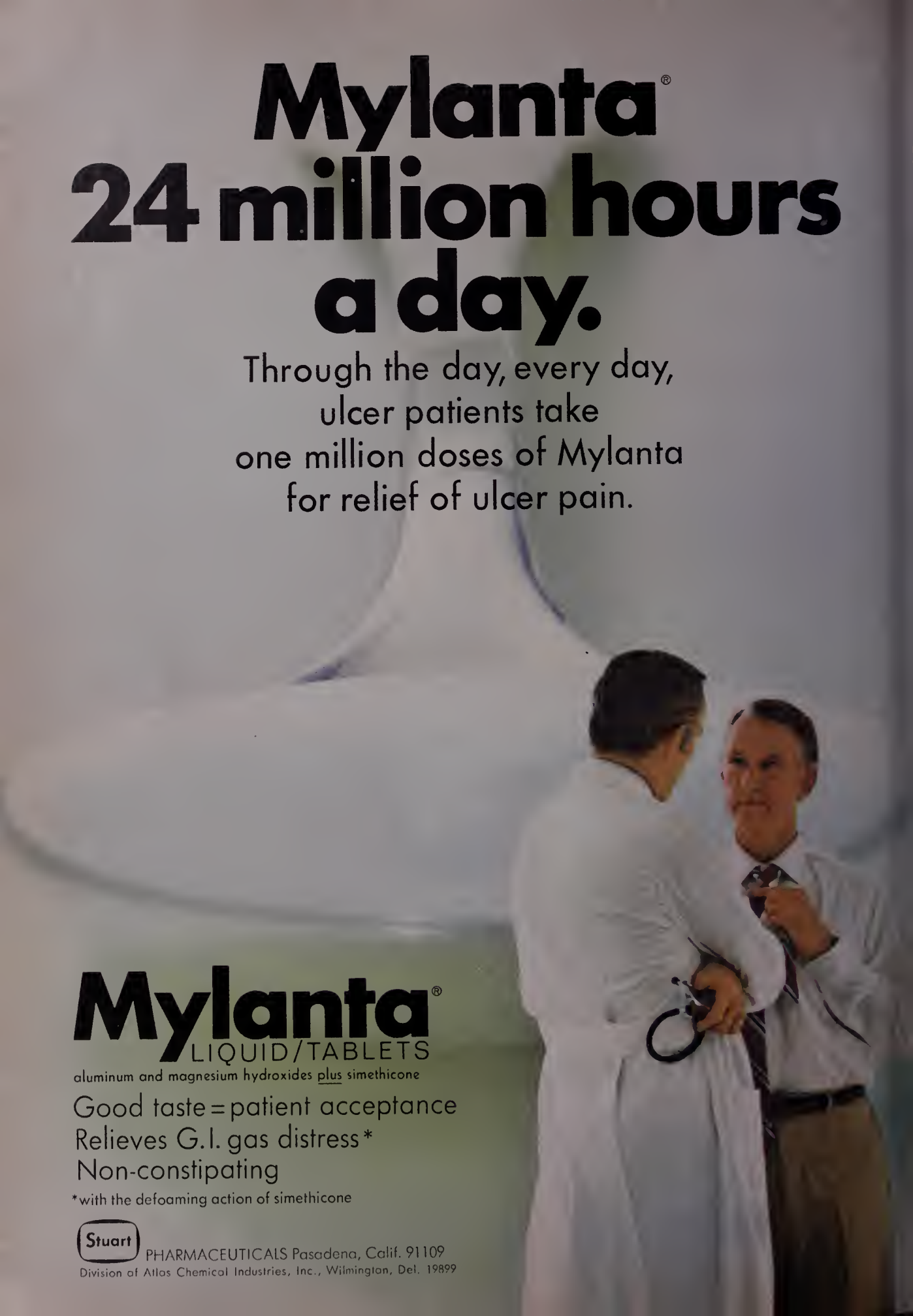
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(Continued from Page 358)

caribou and bear. On his second trip to Alaska, he served as photographer while the rest of the family hunted. In summer his spare time is filled with fishing, frog-gigging and camping. And, as mentioned in the opening paragraph, a knee injury persuaded him to give up both water- and snow-skiing.

For the last eight years, Dr. Weatherly has been active in Fort Payne's Chamber of Commerce, in the Tourist Association (as president), as a member of the Board of Directors of Alabama Mountain Lakes Association and Landmarks of DeKalb County, Inc., of which he is now president.

He was instrumental in acquiring the Fort Payne Opera House (the only one of its kind in Alabama), built during the boom days of the town, around 1889, at a cost of $80,000. It has been restored. Many of the furnishings were acquired from the now demolished Temple Theater in Birmingham. The Opera House is listed in the National Register of Historic Places and The National Register of 19th Century Theaters in America. Fort Payne itself was built in 1836 by an Army officer, commissioned to round up Indians for their removal west. The present town occupies the site of that fort.

Dr. Weatherly's most recent project, the Southern Railway Depot, was listed in the National Register of Historic Places as of September 10, and is unique in its architecture.

Incidentally the name of Weatherly has been identified with Alabama medicine ever since 1857, when Dr. Job S. Weatherly moved to Montgomery from Georgia. A Confederate doctor during the war, he helped reorganize the Medical Association of the State of Alabama after the war, and subsequently served as its president. A son, Charles T. Weatherly, born in 1852, became an M. D., a member of MASA, practicing in Benton, Lowndes County. He was still alive when Owen's History and Biography was published in 1921.

There may or may not be a family connection. Dr. George Weatherly was not around to ask as this was being written.

Certification Examination To Be Given

The American Board of Family Practice announces that it will give its next examination for certification in various centers throughout the United States. The examination will be over a two-day period on April 29-30, 1972. Information regarding the examination can be obtained by writing:

Nicholas J. Pisacano, M. D., Secretary
American Board of Family Practice, Inc.
University of Kentucky Medical Center
Annex #2, Room 229
Lexington, Kentucky 40506

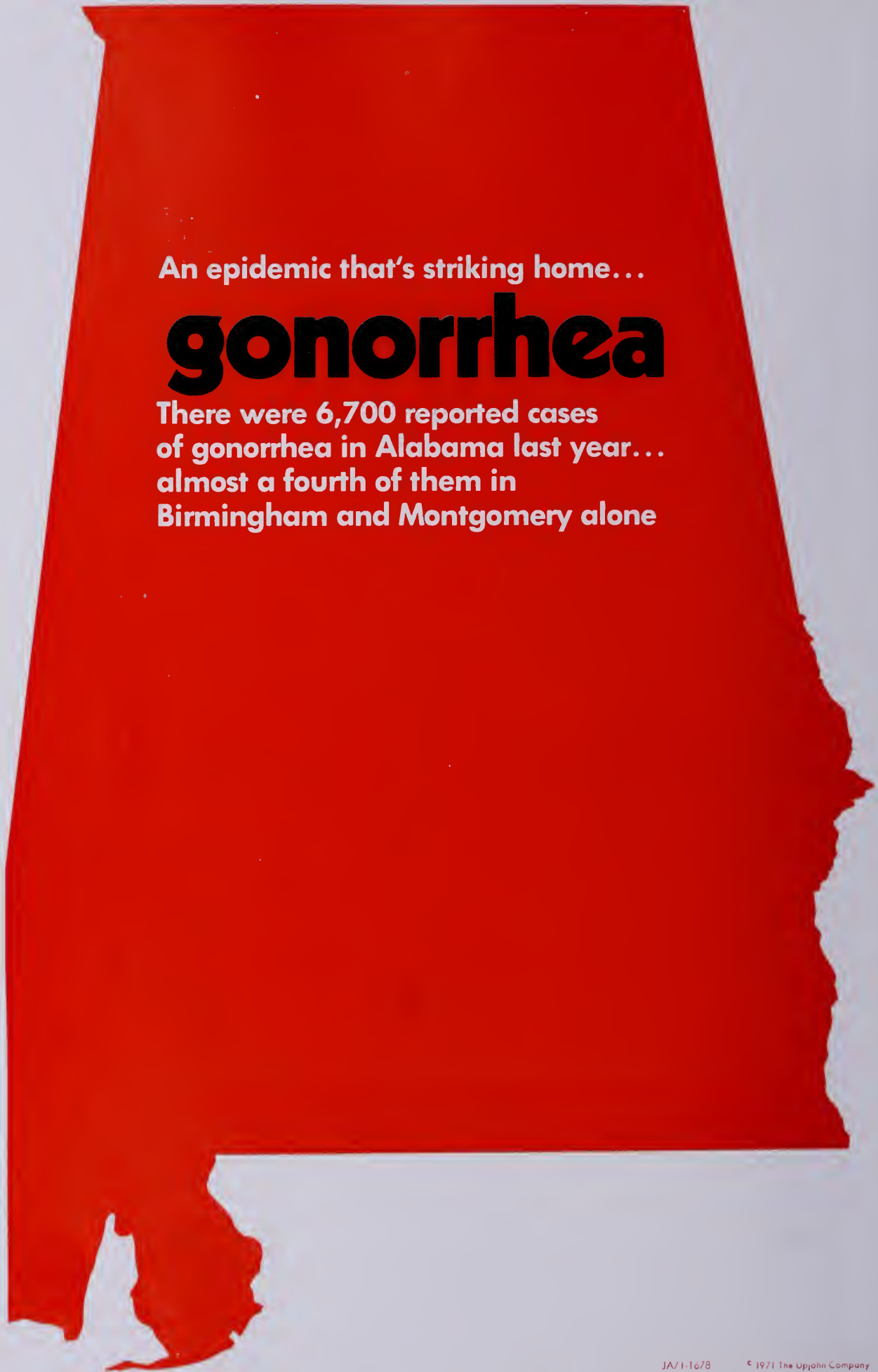
PLEASE NOTE: Deadline for receiving completed applications in the Board office is **February 1, 1972.**

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In Alabama...and everywhere else...
a new alternative

NEW Trobicin® SPECTINOMYCIN DIHYDROCHLORIDE, PENTAHYDRATE, UPJOHN

single-dose treatment for intramuscular use only

a chemically distinct antibiotic indicated specifically for treatment of acute gonorrhea:
in the male–acute urethritis and proctitis
in the female–acute cervicitis and proctitis
when due to susceptible strains of *N. gonorrhoeae*

High cure rate:*96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria for diagnosis and cure are defined on page 3 of advertisement)

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae *in vitro*
(M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour
(average serum concentrations of 15 mcg/ml present 8 hours after dosing)

NOTE: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

For full prescribing information, including contraindications, warnings and precautions, please see last page of this advertisement.

*Doto compiled from reports of 14 investigotors.

Upjohn The Upjohn Company, Kolomozoo, Michigan 49001

Trobicin and the gonorrhea challenge

An accelerating epidemic— a decelerating susceptibility to penicillin

Gonorrhea is now the most prevalent reported communicable disease in the nation. The estimated number of new cases of gonorrhea in the United States exceeded two million for the first time in 1970. To compound the problems, strains of *N. gonorrhoeae* increasingly resistant to penicillin and other antibiotics are appearing throughout the country. Schedules of treatment which were effective only a few years ago now result in a significant percentage of treatment failure. *In vitro* studies have demonstrated that resistance of *N. gonorrhoeae* may also develop to Trobicin.

Thus, while aqueous Procaine Penicillin G remains the drug of choice for the majority of patients, the need for a non-penicillin, intramuscular antibiotic for acute gonorrhea in the male and female is abundantly clear. Such an antibiotic should be effective following a single intramuscular injection —and it should not demonstrate cross-resistance with penicillin

Trobicin—a new alternative specifically for the treatment of acute gonorrhea

Trobicin is indicated in the treatment of acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

High cure rates: 96% of 571 males, 95% of 294 females

No allergic reactions occurred in patients with an alleged history of penicillin hypersensitivity when treated with Trobicin, although penicillin antibody studies were not performed.

Chemically distinct

Trobicin is structurally not related to any other antibiotic commonly used to treat gonorrhea.

The assurance of a single-dose, physician-controlled treatment schedule

Intramuscular injections should be made deep into the upper outer quadrant of the gluteal muscle.

Adult male: Single 2 gram dose I.M. in acute gonorrheal urethritis. Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in gonorrheal proctitis and in patients being re-treated after failure of previous antibiotic therapy. In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams intramuscularly is preferred.

Adult female: Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in acute gonorrheal cervicitis and proctitis.

Safety for use in pregnancy has not been established, nor has safety for use in infants and children.

Clinical Results with Single-Dose Treatment, Intramuscularly* (Data compiled from reports of 14 investigators**)

	Dosage	Number of Patients	Number Cured	Percent Cured
Adult Males: Gonorrheal urethritis	**2 grams** **4 grams**	**475** **96**	**457** **93**	**96%** **97%**
Adult Females: Gonorrheal cervicitis	**4 grams**	**294**	**280**	**95%**

Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin medium in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included in the table above.

The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

*4-gram doses were injected in two gluteal sites.

**Medical Research Files, The Upjohn Company

a chemically distinct antibiotic indicated specifically for treatment of acute gonorrheal urethritis and proctitis in males and cervicitis and proctitis in females when due to susceptible strains of *N. gonorrhoeae*

new Trobicin®

STERILE SPECTINOMYCIN DIHYDROCHLORIDE PENTAHYDRATE, UPJOHN

single-dose treatment for intramuscular use only

Sterile Trobicin® (spectinomycin dihydrochloride pentahydrate)—For Intramuscular injection: 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute ganorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female— single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams —with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9%* w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.

Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LW8)

Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001

Ascorbic Acid: Common Cold

Experiments underway at the Common Cold Research Center in Salisbury, England have yielded little in achieving the Center's stated purpose of discovering a cure or prevention for the common cold, according to Dr. A. S. Beare, member of CCRC's scientific staff.

Among the things the Center has learned about the common cold is that experiments with ascorbic acid failed to establish its effectiveness in preventing colds or shortening their duration. In one experiment, volunteers were given three grams of ascorbic acid daily for three days, but the number and duration of colds were not markedly different from that in a control group. As a result of this and other studies, the Common Cold Research Unit has abandoned experiments with ascorbic acid.

The major difficulty in common cold research, Dr. Beare said, is that there are so many viruses which can cause a cold, it is difficult to develop a vaccine against all or even a majority of them.

—Pediatric Herald.

Noisy Place Like Home

Many household devices generate noise above a 70-decibel "annoyance" range, University of Wisconsin researchers contend.

A psychiatry professor at the university's Medical School, Jack C. Westman, M. D., suggests this may contribute to tension, reduced efficiency, less effective communication, and a desire to escape.

Thus, he says, household noise may be a factor in the "tired housewife syndrome," divorce, and even the generation gap.

—Today's Health.

SALUTENSIN®

hydroflumethiazide, 50 mg./reserpine, 0.125 mg./ protoveratrine A, 0.2 mg.

Brief Summary of Prescribing Information—9-9/22/69.
For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease or *bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in postsympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: *Hydroflumethiazide:* Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

Service items pictured at right and Salutensin samples are available on request from your Bristol Representative or on written request.

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Syracuse, New York 13201

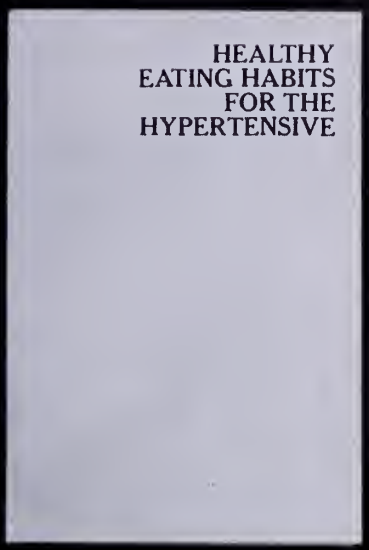
My Doctor's new program to help make hypertension easier to live with—



My guide book from Dr. Fox...



Following my Doctor's good advice...



No problem dieting with this to advise me.



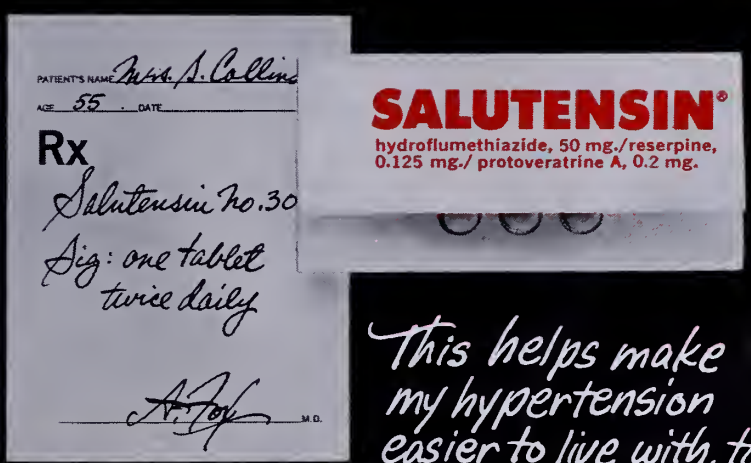
Dining out—on my diet!



Getting the exercise I need—



This goes where I go...



This helps make my hypertension easier to live with, too.

Fatal Poisoning By Colored Hose

It is unfortunate that laws cannot be made sufficiently protective, or else executed so as to prohibit the sale of poisonous clothing, to non-suspicious customers. The *Sanitary Era,* it seems, has been pointing out the dangers of recently introduced colored hose, as now worn by men and women in accordance with the demands of fashions, and has been collecting cases in proof of their dangers to life and health. This progressive health journal * * * * adds the following "to the numerous poisonings from colored hose, heretofore reported": "* * * * Ivan Kamitz, aged 31, died here yesterday. His death resulted from blood poisoning, caused by wearing colored hose on a foot which had blistered. In the middle of June, the Rev. Robert Doiz, pastor of the Reformed Church of Scotia, a suburb of this city, died from the same cause." If the histories of many cases of deaths from poisonous agents not recognized were properly traced, it is probable that many would be found as due to the wearing of colored hose or clothes—colored by poisonous dyes. (Virginia Medical Monthly, October, 1892)

Diplomats' Aphorism

The shortest distance between two points of view is a detour.

—Think.

For Insomnia... one capsule for the rest of the night

NOLUDAR® 300



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

25th AMA Clinical Convention

November 28 - December 1, 1971
New Orleans



/hat is the best way to keep pace with the test medical techniques and advances? Participate in the AMA's 25th Clinical onvention in New Orleans on Nov. 28- ec. 1, 1971! Take part in a convention here participation is the key word. Reg- ter for Postgraduate courses. Use this pportunity to discuss and evaluate your roblems and findings with others in your articular field.

Industrial and scientific exhibits will in- rm you about the latest research and the ewest products and services available. ogether with the scientific sessions, this nformation will be of value when you re- rn to your practice.

The Scientific Program will offer in- epth courses on "Behavioral Problems n Children and Adolescents," "Cardio- ascular Disease," and "Fluid and Electro- te Balance."

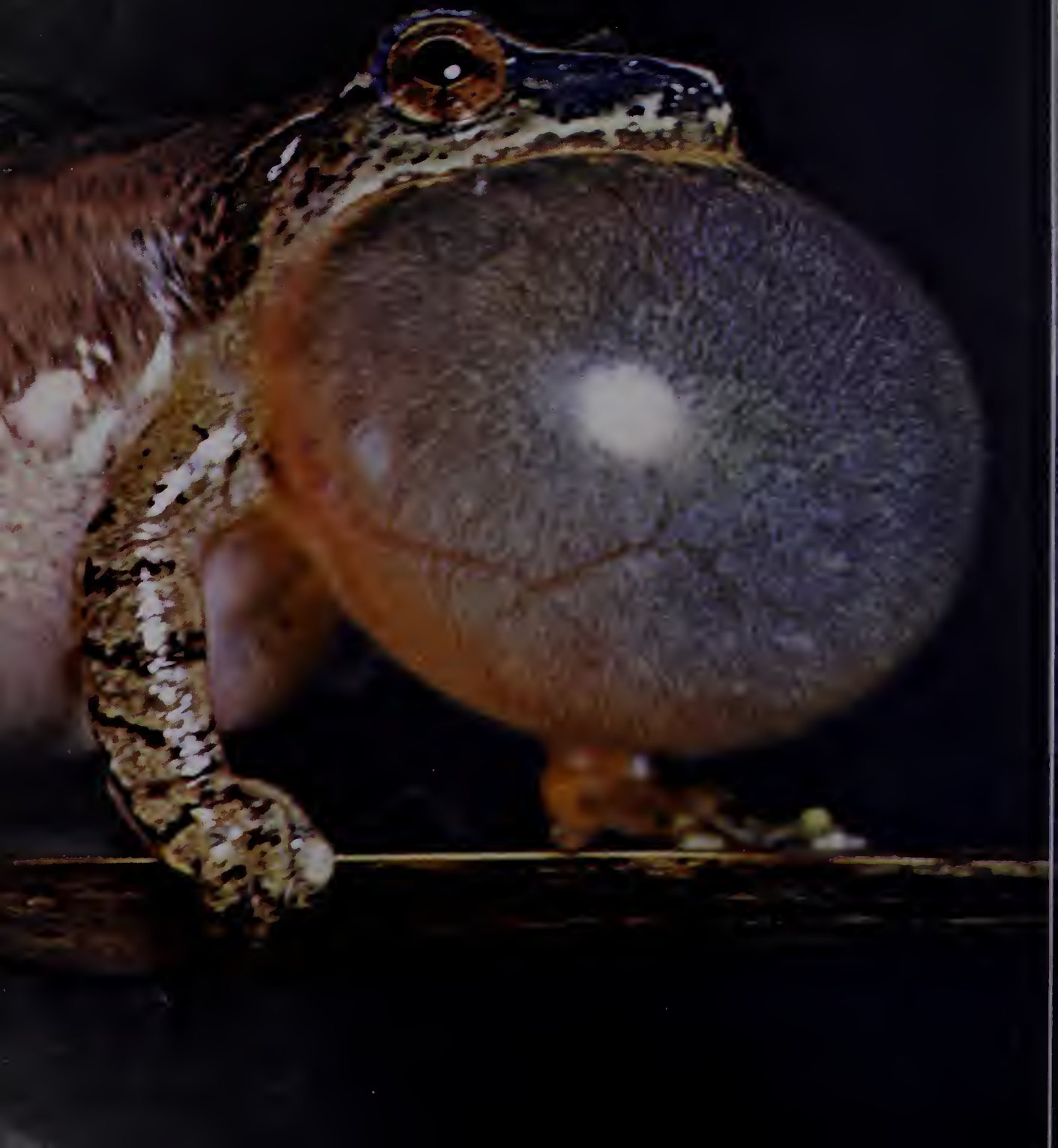
Other sessions of importance will dis- uss the "Diagnostic Evaluation and Man- gement of Joint Diseases," "Derma- ological Problems in Everyday Practice," Current Concepts of Gastroenterology," Office Gynecology: Management of Com- non Problems" and a "Symposium on Diverticular Disease of the Colon: Cur- ent Concepts."

Elegance and an old-world flavor make New Orleans an exceptional site for the 25th Clinical Convention. The Convention Center provides excellent facilities. Hotels n or near the famed French Quarter offer choice accommodations.

Consider bringing the family. They can explore the many historic sites in and around the city, ride a steamship on the mighty' Mississippi, shop for antiques, or browse in a fine selection of stores. You'll find the charm of New Orleans ex- tends to its restaurants where you'll sam- ple the finest in French and Creole cooking.

This is a meeting in which you should participate. Make plans now to attend this important AMA Scientific Meeting.

When irritable colon feels like this



...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distension and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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to move,
and the Latin **sedatus**,
to calm)

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Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

It's working, even when she's not.



10:30 p.m. To bed with tablets or suspension. Either dosage form of Gantanol® (sulfamethoxazole) provides reliable therapy for nonobstructed cystitis.

The convenient *b.i.d.* schedule lets the patient rest assured—while Gantanol fights the infection.

1:30 a.m. Antibacterial blood and urine levels build fast. Peak therapeutic effectiveness starts within 2 to 3 hours of the initial dose.

In addition, Gantanol diffuses readily into interstitial fluids for antibacterial activity at the foci of the infection.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. *Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient indi-



4:30 a.m. Effective through the night. Each dose of Gantanol (sulfamethoxazole) delivers up to 12 hours of antibacterial action against susceptible pathogens, such as *E. coli, Klebsiella-Aerobacter, S. aureus* and others. Action all day. And action all night to prevent retained urine from becoming the medium for bacterial proliferation.

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in nonobstructed urinary tract infections

Gantanol® B.I.D.
(sulfamethoxazole)

Tablets/Suspension

12 hours of therapy with every dose

viduals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

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Heavy Smokers And Lung Cancer

The male over 40 who has already smoked 200,000 cigarettes is five times as likely to develop lung cancer as one who has not smoked this much and 46 times more prone to lung cancer than a nonsmoker.

These results were obtained in a three-and-a-half year follow-up study of 12,322 men 40 to 64 who were part of a larger, long term investigation of tuberculosis conducted in the Kolin district of Czechoslovakia in cooperation with the World Health Organization.

Of the total number studied, 51 per cent were cigarette smokers, 35 per cent nonsmokers, 12 per cent former cigarette smokers and 2 per cent cigar or pipe smokers. All had negative findings on lung x-ray at the beginning of the study.

In the following three-and-a-half year period, 61 men developed confirmed cases of lung cancer. Of these, 44 had already smoked 200,000 cigarettes (based on daily consumption), 11 had smoked fewer than 200,000, 5 were former smokers and 1 had never smoked.

Calculating the risk on the basis of these figures, researchers concluded that the number of persons likely to develop cancer each year is 4.6 per 1,000 for heavy smokers, 0.9 for moderate ones, 1.0 for former smokers and less than 0.1 for nonsmokers.

—Journal, Louisiana State Medical Society.

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Richardson, Samuel Milton, III, b 42, mc Louisiana State Univ. 67, recip. Louisiana 70, 706 East Laurel Street, Atmore, Alabama 36502. GP.

Lauderdale County

Ellis, Bert Hale, b 16, mc Univ. Louisville 43, recip. Kentucky 43, Fontainbleau Apartments, Apt. C-7, 622 North Poplar Street, Florence, Alabama 35630. Anes.

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Pickens County

Douglas, George Capers, b 22, mc Alabama 49, sb 50, Box G, 20 High Street, Reform, Alabama 35481. ObG.

Randolph County

Ussery, Gordon Clopton, Jr., b 38, mc Alabama 64, sb 65, Box 392, 909 Wadley Highway, Roanoke, Alabama 36274. GP-S.

Tallapoosa County

Johnson, Roderick Gray, b 38, mc Alabama 64, sb 65, Medical Arts Building, Alexander City, Alabama 35010. S.

MEMBERS DECEASED

Marshall County

Bennett, Claude Elliotte, Guntersville, Alabama, Deceased 7/7/71

Mobile County

Walker, Howard Seaborn Jones, Sr., Mobile, Alabama, Deceased

Morgan County

Bragg, John Coleman, Decatur, Alabama, Deceased

CHANGES OF ADDRESS

Colbert County

Caden, James W., present Muscle Shoals, to 111 Fleetwood Drive, Muscle Shoals, Alabama 35660.

Campbell, Robert E., present Sheffield, to Box 774, Aberdeen, South Dakota 57401.

Dallas County

Angle, David L., present Selma, to #6 Office Park Circle, Selma, Alabama 36701.

DeBardeleben, Perry C., present Selma, to P. O. Box 1469, Selma, Alabama 36701.

Hinson, William M., present Selma, to P. O. Box 1469, Selma, Alabama 36701.

Smith, William C., present Selma, to #6 Office Park Circle, Selma, Alabama 36701.

Etowah County

Azar, David A., present Gadsden, to 1011 Forrest Avenue, P. O. Drawer 520, Gadsden, Alabama 35902.

Azar, Kathryne N. K., present Gadsden, to 1011 Forrest Avenue, P. O. Drawer 520, Gadsden, Alabama 35902.

Gillmann, Robert W., present Gadsden, to 401 Bay Street, Gadsden, Alabama 35901.

Rowe, Stephen W., present Gadsden, to 525 South 3rd Street, Gadsden, Alabama 35901.

Jefferson County

Cook, Malcolm C., present Birmingham, to Memorial Hospital, Box 847, Bessemer, Alabama 35020.

Crabtree, James C., Jr., present Birmingham, to 811 Princeton Avenue, Birmingham, Alabama 35211.

Hardy, George E., Jr., present Birmingham, to Box 2646, Birmingham, Alabama 35202.

Hunter, John W., Jr., present Fairfield, to 3412 Montevallo Road, Birmingham, Alabama 35213.

Ward, Hartwell H., present Birmingham, to Box 3387A, Birmingham, Alabama 35205.

Madison County

Goodson, William H., Jr., present Huntsville, to 218 Randolph Avenue, S. E., Huntsville, Alabama 35801.

(Continued on Page 380)

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(Continued from Page 379)

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Robertson, James E., present Huntsville, to 700 Green Street, S. E., Huntsville, Alabama 35801.

Mobile County

Sullivan, Daniel F., present Mobile, to P. O. Box 8327, Mobile, Alabama 36608.

Montgomery County

Marshall, Wallace S., present Montgomery, to 3603 Lansdowne Drive, Montgomery, Alabama 36111.

Webb, Edwin L., present Montgomery, to 1722 Pine Street, Montgomery, Alabama 36106.

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Shamblin, James R., Jr., present Tuscaloosa, to 410-B 15th Street East, Tuscaloosa, Alabama 35401.

Yeargan, Wilfred W., present Tuscaloosa, to 577-17th Street, Tuscaloosa, Alabama 35401.

NEW TELEPHONE NUMBERS

Angle, David L., Dallas	872-2314
Azar, David A., Etowah	546-1582
Blythe, John C., Tallapoosa	234-5034
Bush, Jasper D., Jr., Etowah	547-0536
Caden, James W., Colbert	383-5332
Cook, Malcolm C., Jefferson	428-0171
DeBardeleben, Perry C., Dallas	872-6216
Douglas, George C., Pickens	375-6231
Ellis, Bert H., Lauderdale	766-1930
Gillmann, Robert W., Etowah	543-3200
Grote, Carl A., Jr., Madison	536-3313
Hinson, William M., Dallas	872-6216
Howard, Percy J., Baldwin	928-2311
Johnson, Roderick G., Tallapoosa	329-9051
Johnston, William W., Etowah	543-3200
Richardson, Samuel M., III, Escambia	368-4714
Robertson, James E., Madison	536-3313
Rowe, Stephen W., Etowah	543-3611
Rutherford, Charles L., Jr., Mobile	433-6595
Santina, Henry D., Tuscaloosa	758-2794
Shamblin, James R., Jr., Tuscaloosa	345-3244
Smith, William C., Dallas	872-2314
Ussery, Gordon C., Jr., Randolph	863-8131

(Continued on Page 383)

The girth control pill



Tepanil® Ten-tab®

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(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets. One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.) TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Informotion—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with orthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Controindicotions:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precoutions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instonces, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastraintestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rosh, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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Quinamm™ Specific therapy for night leg cramps

(quinine sulfate 260 mg., aminophylline 195 mg.)

(Continued from Page 380)

Ward, Hartwell H., Jefferson 674-6462

Webb, Edwin L., Montgomery 262-6661

CHANGE OF SPECIALTY

Montgomery County

Matthews, Hubert I., 2119 East South Boulevard, Montgomery, Alabama 36111. I-D.

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Tuscaloosa County

President—James H. Hollingsworth, 427 University Avenue East, Tuscaloosa, Alabama 35401.

MEMBERS TRANSFERRED

Baldwin County

Howard, Percy John, 306 South Greeno Road, Fairhope, Alabama 36532, from member Escambia County Medical Society to member of Baldwin County Medical Society. S.

Tallapoosa County

Blythe, John Coley, 228 Clubview Drive, Alexander City, Alabama 35010, from member Jefferson County Medical Society to member of Tallapoosa County Medical Society. I.

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—J. Irwin Miller, chairman,
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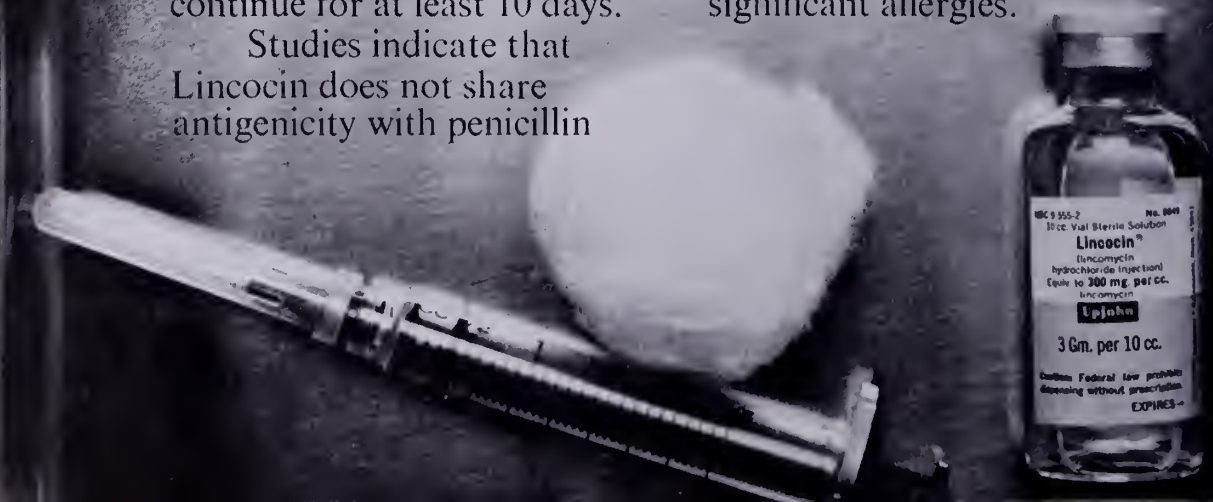
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Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With β-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



So is penicillin-resistant staph.

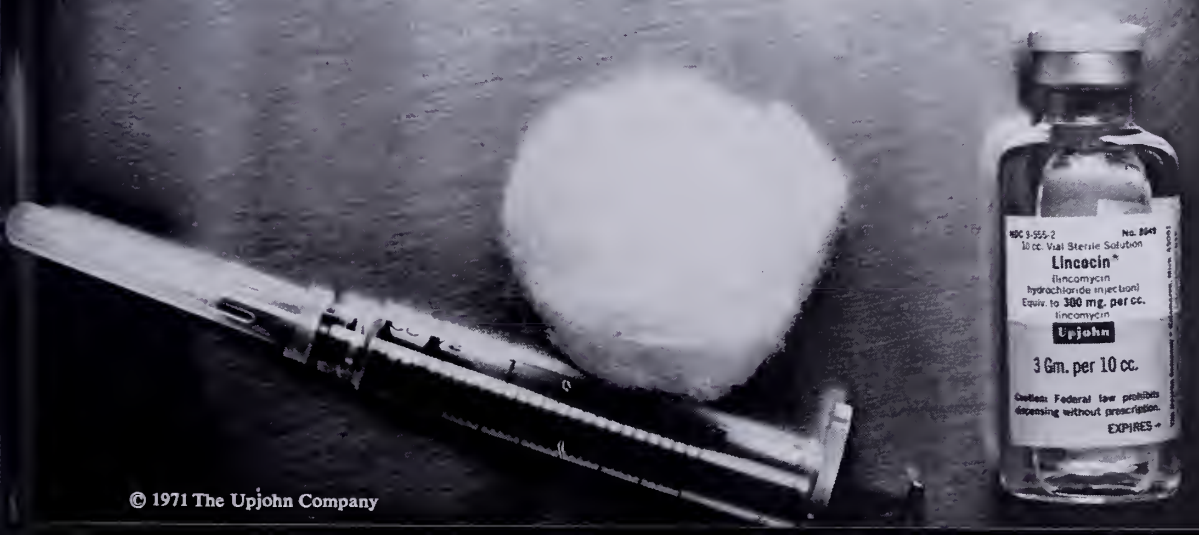
Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

Sterile Solution (300 mg. per ml.)

Lincocin®
(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.



Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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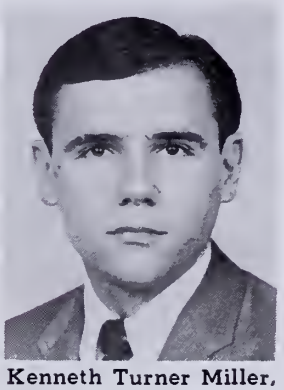
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Samuel Prescott McManus, M. D.



Kenneth Turner Miller, Jr., M. D.



Lawrence Michael Nicholas, M. D.



Thomas Newton Nickles, M. D.



Thomas Holden Patterson, M. D.



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Epidemiology Of TB Infection

Dr. Russell W. Currier

Montgomery, Alabama

Previous investigations in Alabama indicate that schools play an important role in the epidemiology of tuberculosis. In this environment where large groups of susceptible children are assembled, the circumstances favoring transmission of the tubercle bacilli are ideal. The apparent ease with which colds, influenza, measles, and other viral diseases are transmitted among school children serves to illustrate how the school room environment permits extensive "contact spread." One of my former professors in public health stated that we live in a state of "salivary communism." And in no place is this more true than in a classroom filled with children and further compounded by possible inadequacies of the ventilation system.

Active tuberculosis is usually rare in children, especially younger children. (This is not to say that tuberculosis is not a serious disease in children.) However, people in the adult age groups have higher rates of active disease; therefore, school employees of these age groups present the greatest exposure potential of infection for school children.

Last year at a similar meeting, Mrs. Nan Clenny reported on a mini-epidemic of TB in Henry County, Alabama, which was school based. In this outbreak, even the school bus served as a location of transmission, or perhaps a "vehicle" of transmission, in more ways than one. This outbreak and others on file with the TB Section prompted the State Committee of Public Health to recommend a policy of mandatory annual tuberculin testing for teachers and other school employees.

Tuberculin tests, as you well know, have the advantage of detecting recent TB infection before radiographic changes are detectable. Any positives or recent converters could be radiographed and hopefully placed on prophylactic drug therapy. This in turn would protect pupils and other school personnel from infection by a recently reactivated case.

This fall the Montgomery County Health Department, in response to this legislation,

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Presented at the Third Annual Tuberculosis Workers' Meeting in Montgomery, Alabama on February 4, 1971.

Dr. Currier is an Epidemiologist with the Alabama Department of Public Health.

has been actively skin testing school employees of the county. The largest single group was tested in September-October in which 1,269 employees were skin tested. This sample group represents 54 per cent of the total number of employees. Other employees were tested either in August or later in November and December.

In this group, 104 TB skin test reactors of 10 mm or more were noted. This yields an 8.27 per cent overall reactor rate, which is still less than the 1969 state-wide reactor rate of 11.2 per cent for people in age groups 25-64 years, which would include the majority of school employees.

Occupationally, the employees break down into food handlers, teachers, and all other employees. The number of positive reactors in each group include 34 teachers, 28 food handlers, and 43 "other employees." These numbers are comparable but when one computes attack rates by population at risk, or percentages, a different picture emerges.

Specifically, one notes that 5.2 per cent of the teachers were tuberculin positive, 10.9 per cent of the food handlers were positive, and 11.8 per cent of "other employees" were positive. One immediately recognizes that the attack rates of the teachers are only one-half the attack rate of the other two groups. This difference is probably largely due to racial composition in the groups, with the food handlers and "non-teaching other employees" having a higher proportion of blacks. Racially, the 104 reactors break down into 16 white and 88 black. Percentagewise the reactor rate is 2.5 per cent of the whites and 14.1 per cent of the non-whites tested. In 1969, the statewide white reactor rate was 2.59 per cent, or roughly the same. However, the state-wide non-white reactor rate is only 6.91 per cent, less than one-half of the non-white reactor rate of Montgomery school employees. In review, these figures again suggest that increased case finding efforts be directed to high-risk non-white groups.

Focusing on the 104 reactors, one notes that 53 per cent of the group are in the 45 to 64 year age group. State-wide this age group has the second highest reactor rate after the 65 and over group. Obviously, case finding efforts are most fruitful when directed to older personnel.

The significance of an individual's skin test status converting from negative to positive is well appreciated in this audience. Of the 104 school employees, 49, or almost 50 per cent, had less than 10 mm readings in 1969. The remaining are new employees without previous recorded intradermal tests. Conversion indicates recent exposure to the tubercle bacillus and active primary infection. Therefore, converters are a high priority group for radiographs and examination. These individuals were subsequently radiographed and placed under prophylactic drug treatment. Fortunately, no active cases of tuberculosis were revealed in the X-rays. I might add that state-wide the program has detected three teachers and two food handlers. A fourth teacher with tuberculosis has just been reported this week.

Summary

School-age children can acquire TB in the community and in the schools. Routine skin testing of first grade school children is of recognized value as the procedure serves to monitor for TB cases in household groups and neighborhoods. Routine skin testing of higher grades assists in monitoring for tuberculosis infection in schools and to a lesser extent in the community.

Also of value and now required by county school boards is routine annual skin testing of school employees who could have primary infections or perhaps more commonly endogenous reinfection (reactivations). These numbers are small when compared to student enrollment; however, their probability of having an active infection is many-fold greater than students by virtue of their age. Also, school employees' potential for trans-

(Continued on Page 393)



the compound analgesic that calms instead of caffeinates

In addition to pain, this patient has experienced anxiety, fear, embarrassment, anger, and frustration. It's very likely that these psychic factors actually accentuated his perception of pain. Surely the last thing he needs is an analgesic containing caffeine. A much more logical choice is Phenaphen with Codeine. It provides a quarter grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can control the pain more effectively. It's no accident that the Phenaphen formulations contain a sedative rather than a stimulant. Don't you agree, Doctor, that psychic overlay is an important factor in most of the accident cases you see?

Phenaphen® with Codeine

Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming).

Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. *Contraindications:* Hypersensitivity to any of the components. *Precautions:* As with all phenacetin-containing products, excessive or prolonged use should be avoided. *Side effects:* Side effects are uncommon, although nausea, constipation and drowsiness may occur. *Dosage:* Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

A. H. Robins Company, Richmond, Va. A·H·ROBINS



'head clear upon arising'

For upper respiratory allergies and infections including the common cold, Dimetapp Extentabs® effectively relieve the stuffiness, drip and congestion all night and all day long on just one Extentab every 12 hours. For most patients drowsiness or overstimulation is unlikely.

prescribing information appears on next page

A·H·ROBINS

A. H. Robins Company
Richmond, Va. 23220

Dimetapp® Extentabs

Dimetane® (brompheniramine maleate), 12 mg., phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg

(Continued from Page 390)

mitting infection within the school environment has been documented and presented.

A review of Montgomery County *school employee* skin testing program did not reveal any active pulmonary tuberculosis cases. However, a significant number of skin converters from the previous year indicates household and community exposure to active TB cases has occurred. This fact alone is sufficient justification for continued TB surveillance programs in school employees, a group of personnel that presents extensive exposure to an inordinately large group of susceptibles.

Nuclear Battery Powers Pacemaker

A nuclear battery so small and reliable it can be implanted in the body to power a cardiac pacemaker for up to 10 years is in production by Gulf General Atomic Company, San Diego, Calif.

The power source was developed in England by the United Kingdom Atomic Energy Research Establishment. GGA, a division of the Gulf Oil Corporation, has been licensed for the American manufacture and worldwide marketing of the battery.

The cylindrical device, which weighs only 1½ ounces and is about one-half inch in diameter and two inches long, derives its power from a tiny amount of the manmade radioactive isotope, Plutonium—238. Heat generated by the radioactive isotope activates a thermoelectric converter to produce 200 microwatts of electric power (200 millionths of a watt), sufficient to create the pulsed electric shock that stimulates a heart muscle. Plutonium for the battery is produced by the U. S. Atomic Energy Commission.

Dimetapp Extentabs®

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.
CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.
WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.
PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.
HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

Why you should use a Collection Agency

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Montgomery, Alabama 36101

Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

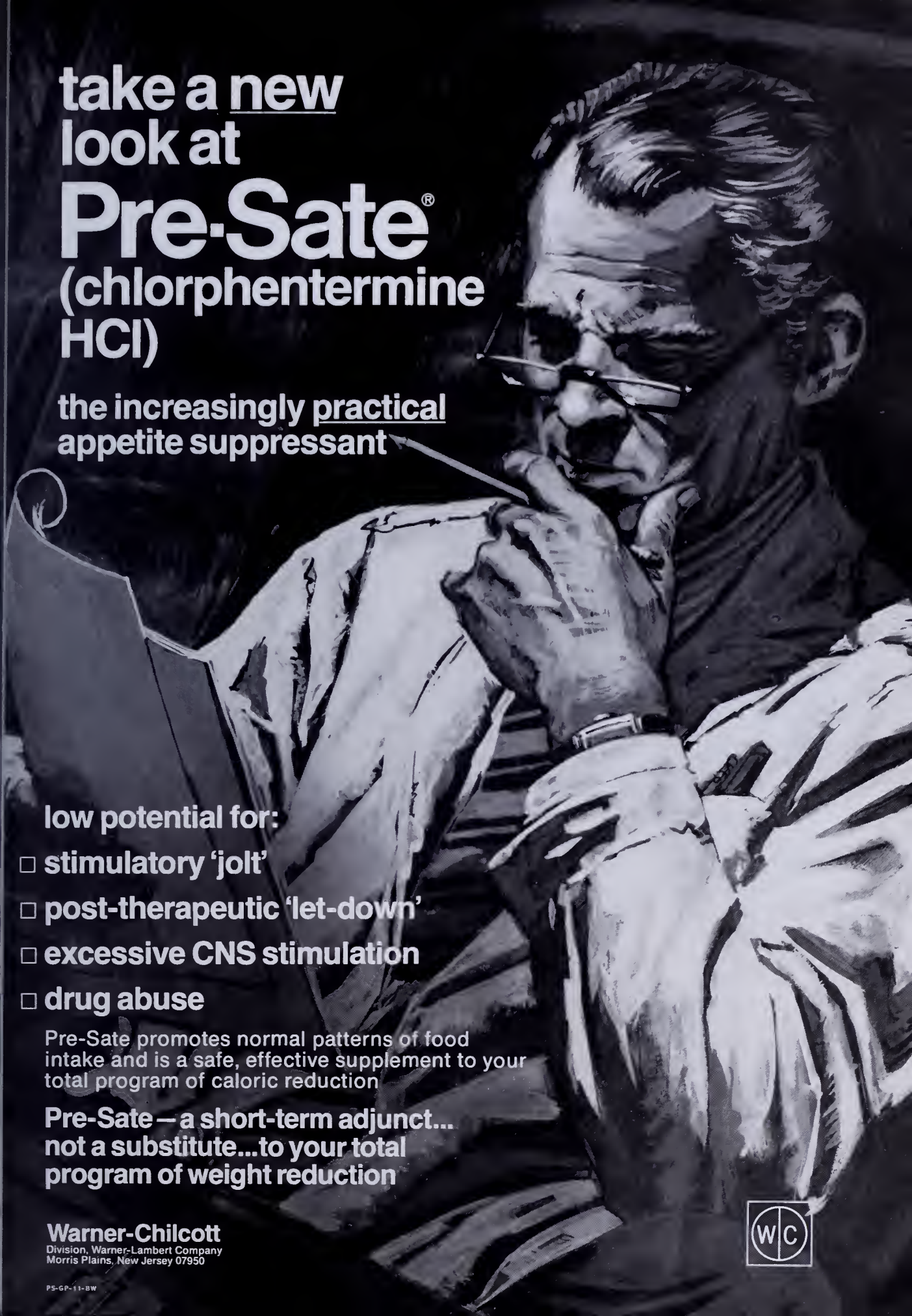
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.


take a new look at
Pre-Sate®
(chlorphentermine HCl)
the increasingly practical appetite suppressant
low potential for:
□ stimulatory 'jolt'
□ post-therapeutic 'let-down'
□ excessive CNS stimulation
□ drug abuse
Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction
Pre-Sate – a short-term adjunct... not a substitute...to your total program of weight reduction
Warner-Chilcott
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PS-GP-11-BW
WC

MIST Brings Free Consultation To All Alabama Doctors

An Alabama doctor, in the remotest rural community in the state, is only a free telephone call away from consultation with the foremost specialists in any field at Birmingham's Medical Center. More than that, Alabama is the only state in the union presently providing such service.

There's no mystery about MIST (Medical Information Service, Telephone). To physicians and health personnel throughout the state, it is a "hot line," a toll-free telephone number providing them immediate access to on-the-spot and sometimes lifesaving medical advice at UAB Medical Center.

"Improved patient care is the primary purpose of MIST," explains Dr. Margaret S. Klapper, director of the Program of Continuing Medical Education of the School of Medicine. "It is of great benefit to the physician because it can provide him with new and current information at a time when he needs it, and can put it to immediate use."

MIST began as a pilot project in July, 1969, after Dr. Klapper had consulted staff members at the Medical Center and the South Central Bell Telephone Company, which planned and installed the statewide telephone system.

Originally MIST was offered to four counties in Alabama. Two were intermediate size, one was entirely rural, and the other was urban. The Medicine and Surgery Departments, in addition to two smaller departments—Dietetics and Pharmacy—participated in the project.

"Our response was overwhelming," Dr. Klapper reports. "Not only did we get calls from doctors in those four counties, we received calls from doctors all over the state who had learned of MIST. As a result, we went statewide much sooner than we expected."

The MIST lines are open 24 hours a day, seven days a week. When a call comes in, a specially trained operator answers and transfers the call to the appropriate staff person. Personnel can be located quickly when they are not in their offices because they carry pocket pagers that signal them when they are needed on a call.



DR. MARGARET S. KLAPPER, Director of the Medical Center at the University of Alabama in Birmingham, is pleased with the results of the MIST program, which she administrates. "MIST has removed geographic barriers and has given physicians something they have always sought and apparently found useful—the opportunity to 'talk over' their patients with medical colleagues."

"The operator," Dr. Klapper explains, "is a key person to the success of the program. She must be knowledgeable in both the medical sciences and the faculty to channel calls appropriately."

Every MIST telephone call to the Medical Center is recorded and monitored. Data are later extracted for analysis and study. "We've learned, for example, that most calls are highly specific, usually made while the patient is at hand, and pertain to diagnosis or management," Dr. Klapper says.

When MIST first went into operation, the



EVERY MIST TELEPHONE call to the Medical Center is recorded and monitored. Data are later extracted for analysis and study. When MIST first went into operation, the number of calls received at the Center each day averaged about 20. Now, the number of calls per day averages about 100.

number of calls handled each day at the Center averaged about 20. Now, the number of calls per day averages about 100. Consultations often result in a chain of discussions over a period ef hours or days.

Because many counties in Alabama are rural, the MIST line has proved to be of special importance to the so-called "country doctor," who no longer has to feel isolated. According to Dr. Klapper, the greatest percentage of calls has come from doctors in rural areas.

Te find new things, take the path you took yesterday.

—John Burroughs.

. . . Any critic can establish a wonderful batting average by just rejecting every new idea.

—J. D. Williams.

Health Care Systems Design

The National Center for Health Services Research and Development of the Department of Health, Education, and Welfare has recently awarded the Department of Industrial Engineering at the University of Missouri—Columbia a training grant to support a Ph. D. program in Health Care Systems Design. This grant provides additional resources to support the Department's extensive current commitment in this area. A vital feature of the program is the unique collaboration between the University School of Medicine and the College of Engineering. The program emphasizes industrial engineering analysis tools, as well as medical diagnosis and treatment practice, health care organization, and methods of health care systems evaluation. These areas of emphasis are applied in a series of design experiences. The program culminates in an original research dissertation.

A limited number of openings for admission and financial support are available to highly qualified persons with medical, paramedical, engineering, and science backgrounds, whe have a professional commitment to research, design, or management of health care systems. Persons with a strong quantitative background who are interested in the program may write for more information to H. Allan Knappenberger, Ph. D.; Professor and Director of Graduate Studies; Department of Industrial Engineering; University ef Missouri; Columbia, Mo. 65201.

Wet Mop Dangerous

That the wet mop contributes to massive bacterial contamination in the hospital is clearly evident in a recent report published by Westwood and his colleagues in the April 1971 issue of "Applied Microbiology." . . . I suggest that we now turn our attention to development of a disposable mop head."

—Editorial, Clinical Medicine.

Wine On Hospital Trays

Wine is appearing more and more on the trays of patients in hospitals, nursing homes, and rehabilitation institutes.

"Bedside Nurse," official publication of the National Federation of Licensed Practical Nurses, observes in its August issues:

"When dietitians come by to discuss diets, many are asking, 'Do you prefer red or white wine with your dinner?' After visiting hours, the lounges of many wards become meeting places for patients who can sit, talk and sip a glass of sherry."

In its cover-story article, the monthly magazine notes that "Increasingly, the dietary and therapeutic advantages of wine are being recognized and used by physicians and institutions around the country."

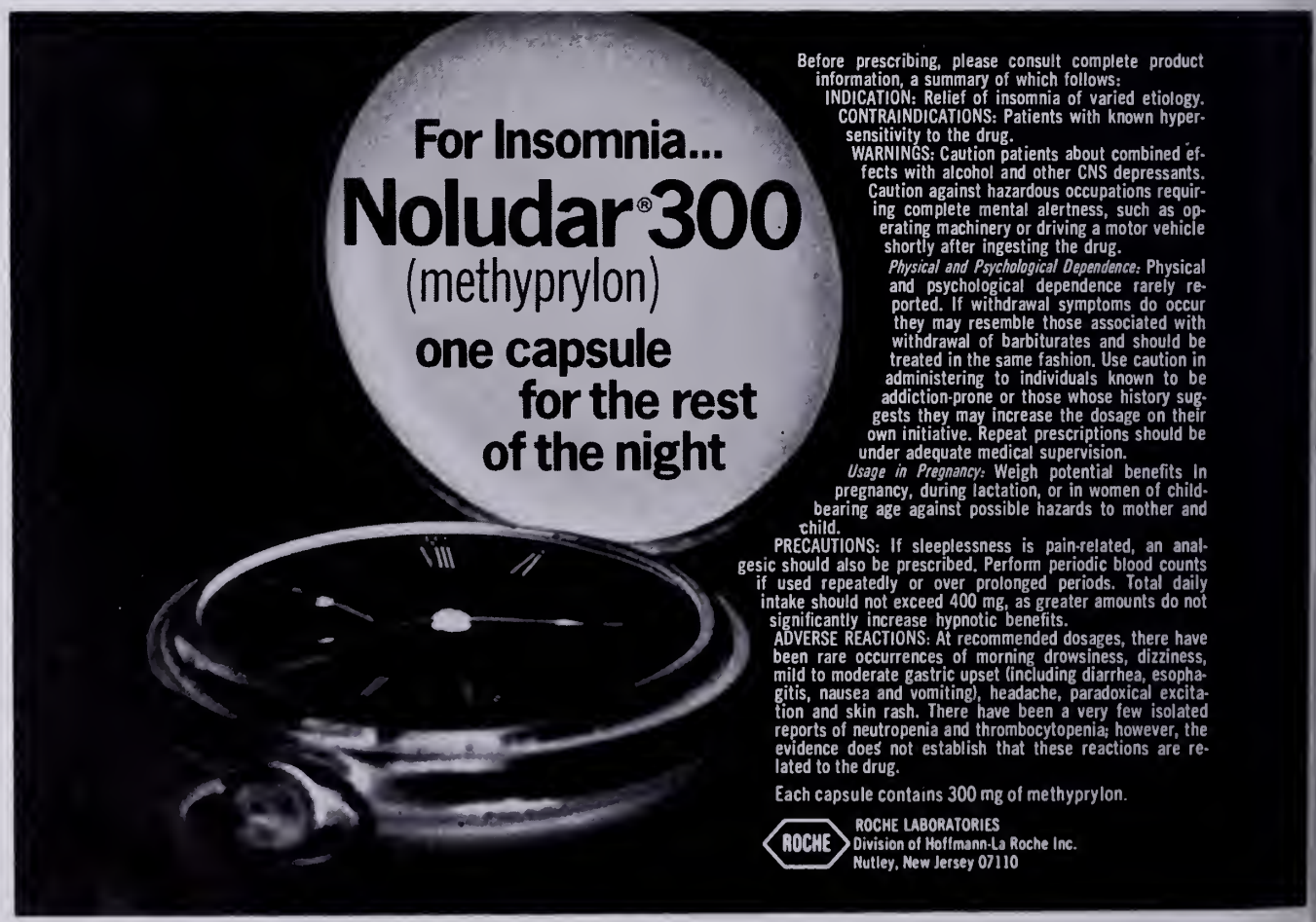
Drug Slows Tooth Decay

There is new hope for the control and possible elimination of dental decay.

A Medical Center research team at the University of Alabama in Birmingham (UAB) has found that experimental animals taking an antibiotic called actinobolin have 81 per cent less tooth decay than those taking no drugs. Clinical trials are being planned to test the drug's effectiveness in the oral cavity.

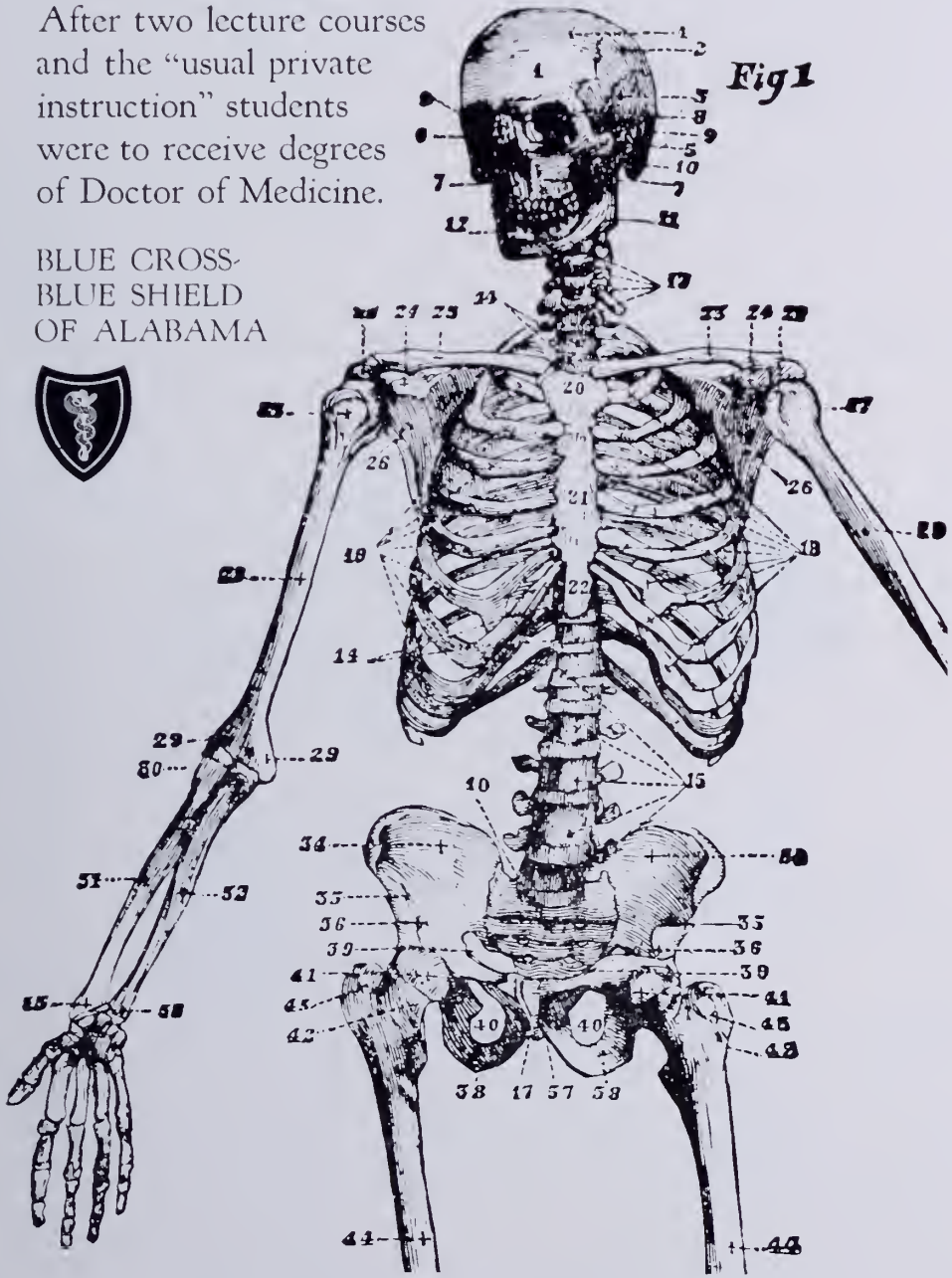
Dr. D. E. Hunt, investigator in the UAB School of Dentistry's Institute of Dental Research, said that the idea of using antibiotics to reduce the incidence of dental decay is not a novel one.

"However, the practical application of antibiotics as decay-preventing agents has been limited by a variety of problems in the past," he added.



In 1845 the Alabama Legislature authorized the establishment of a Medical College. After two lecture courses and the "usual private instruction" students were to receive degrees of Doctor of Medicine.

BLUE CROSS-
BLUE SHIELD
OF ALABAMA



Zymotic Diseases

The House of Delegates referred to the Section on State Medicine, a resolution from the Committee on Cremation which recommended "that the burial of all persons dying of zymotic diseases be placed by law under the control of the health authorities, and that in all such cases of disease, chemical agents be used by such authorities to bring about a rapid disintegration of the dead body."

—Digest of Official (AMA) Actions, 1846-1958.



We are pleased to announce

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Saint Jude Treatment

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'Health's Treasurehouse'

Quite aside from the cults and conceptions that beset us continually, every couple of decades produces a promising panacea to enjoy its season in the sun.

One will recall the Vermont M. D. with his book about the merits of honey and vinegar. And old timers will remember Emile Coue with his formula: "Every day in every way, I'm getting better and better."

And now Molly Castle, wife of a London pediatrician, and in her own right author and columnist, bylines a book that tells all in the title, "Health and Beauty from the Sea." A Vertex Book published in this country by Auerbach of Princeton, N. J., it is a 165-page book priced at $5.95.

Molly Castle goes back into history to find the ancients knew about health benefits that came out of the sea. Cleopatra used turtle oil to condition her skin. Doctors, according to her, have found the sea a greater source of antibiotic than the land; and that conch oil may become a major deterrent to arthritis. She adds that "the benefits of exercise with seaweed and seawater, breathing sea air, using oils and creams for skin care, cooking delicious and wholesome seafood dishes—all are here for you to discover."

—M.

An unknown author once said:

"I am only One,
But I AM one;
I cannot do everything,
But I can do something.

"What I can do, I ought to do,
And what I ought to do,
By the Grace of God,
I WILL DO."

—Druid Oak, Druid City Hospital.

Wellcome
Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

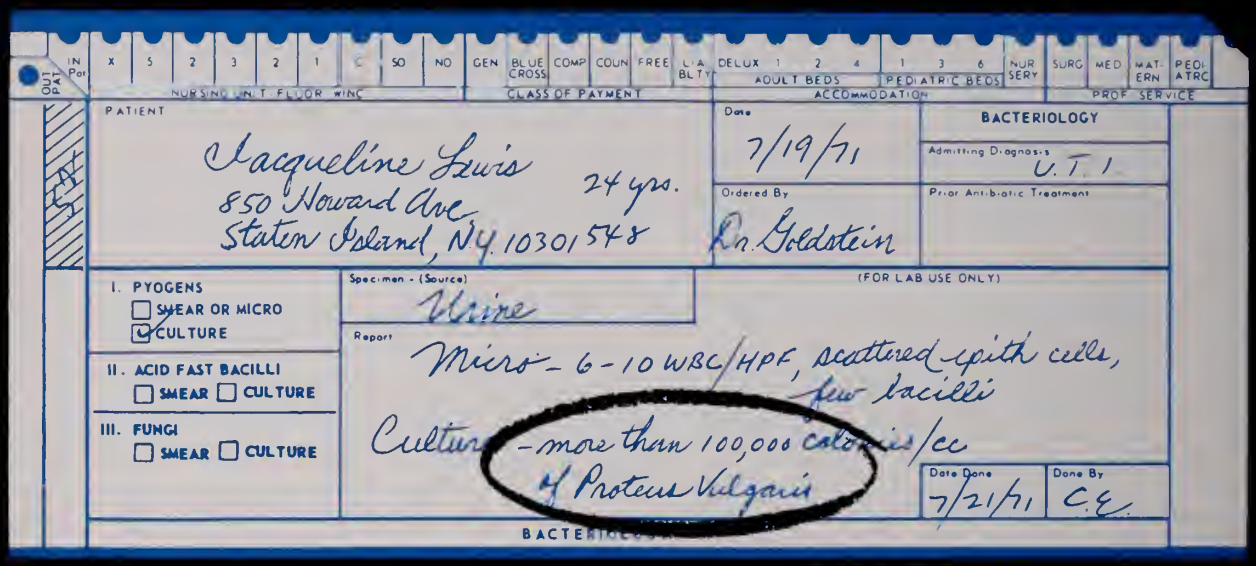
A gratifying announcement about Empirin® Compound with Codeine



You may now specify up to five refills within six months when you prescribe Empirin Compound with Codeine (unless restricted by state law).

It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.



OUT PAT | IN Pat | X | 5 | 2 | 3 | 2 | 1 | C | SO | NO | GEN | BLUE CROSS | COMP | COUN | FREE | L/A BL TY | DELUX | 1 | 2 | 4 | 1 | 3 | 6 | NUR SERY | SURG | MED | MAT ERN | PEDI ATRC

NURSING UNIT FLOOR WING | CLASS OF PAYMENT | ACCOMMODATION: ADULT BEDS / PEDIATRIC BEDS | PROF SERVICE

PATIENT

Jacqueline Lewis 24 yrs.
850 Howard Ave.
Staten Island, NY. 10301 548

Date: 7/19/71

BACTERIOLOGY

Admitting Diagnosis: U.T.I.

Ordered By: Dr. Goldstein

Prior Antibiotic Treatment

I. PYOGENS
☐ SMEAR OR MICRO
☑ CULTURE

II. ACID FAST BACILLI
☐ SMEAR ☐ CULTURE

III. FUNGI
☐ SMEAR ☐ CULTURE

Specimen - (Source): Urine

(FOR LAB USE ONLY)

Report:
Micro - 6-10 WBC/HPF, scattered epith cells, few bacilli
Culture - more than 100,000 colonies/cc
of Proteus Vulgaris

Date Done: 7/21/71 | Done By: C.E.

BACTERIOLOGY

the choice is clear:

Pyopen®

(sterile disodium carbenicillin)

A serious urinary tract infection...
Proteus vulgaris, confirmed by pure culture. Fortunately, the strain proves sensitive to carbenicillin and the patient is not allergic to penicillins. The choice is clear: Pyopen.

Unlike other antibiotics currently available for the treatment of Gram-negative sepsis, there are no reports of nephrotoxicity or ototoxicity with Pyopen therapy. Particularly valuable in urinary infections, because of its exceptionally high urine levels, its effectiveness against *Ps. aeruginosa* and *Proteus* species has been amply confirmed by clinical experience and microbiologic studies.

Pyopen is a product of Beecham, the company which pioneered most of today's semi-synthetic penicillins. Your Beecham-Massengill representative would like to give you proof of our dedication to the concept of Total Service.

THE TOTAL SERVICE CONCEPT:
Beecham-Massengill's dedication to the concept of total service is exemplified by the Pyopen Program — offering valuable teaching-learning materials and an added measure of personal attention: *Gram-Negative Sepsis*, a multimedia presentation by leading American medical authorities...*A Profile of Pseudomonas*, a monograph for the clinical microbiologist... *24-hour consultation service* in matters relating to carbenicillin (phone: 201-778-9000)... *emergency supply*, a novel plan for assuring the continual availability of Pyopen to hospitals specifying this brand of carbenicillin.

For additional information about the Beecham-Massengill Total Service Concept see our representative or write to us directly.

BEECHAM-MASSENGILL PHARMACEUTICALS
Div. of Beecham Inc.
Bristol, Tennessee 37620

PRESCRIBING INFORMATION **Indications:** Primarily for treatment of infections due to susceptible strains of *Pseudomonas aeruginosa*, *Proteus* species (particularly indole-positive strains), and certain *Escherichia coli*. Clinical effectiveness has been demonstrated in the following infections when due to these organisms: Urinary tract infections, severe systemic infections and septicemia; acute and chronic respiratory infections (while clinical improvement has been shown, bacteriologic cures cannot be expected in patients with chronic respiratory disease and cystic fibrosis); soft tissue infections. Although PYOPEN (disodium carbenicillin) is indicated primarily in Gram-negative infections, its activity against Gram-positive organisms should be kept in mind when both Gram-positive and Gram-negative organisms are isolated (see Actions). **Note:** During therapy, sensitivity testing should be repeated frequently to detect the possible emergence of resistant organisms. **Actions:** Organisms found to be susceptible *in vitro* include: Gram-Negative Organisms-*Ps. aeruginosa*, *Proteus mirabilis*, *Pr. morganii*, *Pr. rettgeri*, *Pr. vulgaris*, *E. coli*, *Enterobacter* species, *Salmonella* species, *Hemophilus influenzae*, and *Neisseria* species. Gram-Positive Organisms-*Staphylococcus* aureus (nonpenicillinase-producing), *Staph. albus*, *Diplococcus pneumoniae*, Beta-hemolytic streptococci, and *Streptococcus faecalis*. Some newly emerging pathogenic strains of *Herellea*, *Mima*, *Citrobacter*, and *Serratia* have also shown *in vitro* susceptibility. Not stable in the presence of penicillinase. *Klebsiella* species are resistant. Some strains of *Pseudomonas* have developed resistance fairly rapidly. **Contraindications:** Known penicillin allergy. **Warnings:** Serious and occasional fatal hypersensitivity (anaphylactic) reactions have been reported in patients on penicillin therapy. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens. There have been reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, appropriate therapy should be instituted and discontinuance of disodium carbenicillin therapy considered, unless the infection is life threatening and only amenable to disodium carbenicillin therapy. The usual agents (antihistamines, pressor amines, and corticosteroids) should be readily available. **Usage in Pregnancy:** Safety for use in pregnancy has not been established. **Precautions:** As with any other potent agent, it is advisable to check periodically for organ-system dysfunction, including renal, hepatic, and hematopoietic systems, during prolonged therapy. Emergence of resistant organisms, such as *Klebsiella* species and *Serratia* species, which may cause superinfection, should be kept in mind. Each gram contains 4.7 mEq sodium; in patients where sodium restriction is necessary, such as cardiac patients, periodic electrolyte determinations and monitoring of cardiac status should be made. Observe patients with renal impairment for bleeding manifestations and adhere strictly to dosage recommendations. If bleeding manifestations appear, discontinue antibiotic and institute appropriate therapy. As with any penicillin preparation, the possibility of an allergic response, including anaphylaxis, may occur, particularly in a hypersensitive individual. **Administration:** Intramuscular injections should be made well within the body of a relatively large muscle (not into the lower and mid-third of the upper arm), and aspiration is necessary to help avoid inadvertent injection into a blood vessel. May be given by either intravenous injection or intravenous infusion. After reconstitution with Sterile Water for Injection unused portions should be discarded after 24 hours if stored at room temperature, or after 72 hours if refrigerated. **Adverse Reactions:** *Hypersensitivity Reactions*—Skin rashes, eosinophilia, pruritus, urticaria, drug fever, and anaphylactic reactions. *Gastrointestinal Disturbances*—Nausea. *Hemic and Lymphatic Systems*—Hemolytic anemia, thrombocytopenia, leukopenia, neutropenia, in uremic patients receiving high doses (24 gm/day), hemorrhagic manifestations associated with abnormalities of coagulation tests, such as clotting and prothrombin time. *Hepatic and Renal Studies*—SGOT and SGPT elevations have been observed, particularly in children. To date, no clinical manifestations of renal disorders have been demonstrated. *Central Nervous System*—Convulsions or neuromuscular irritability could occur with excessively high serum levels. *Local Reactions*—Pain at the site of injection, sometimes accompanied by induration. Vein Irritation and Thrombophlebitis—particularly when undiluted solution is injected directly into the vein. **How Supplied:** Available in 1 Gm. and 5 Gm. vials.
Before prescribing or administering, see package circular or PDR.

"Drug research gives me the tools that save lives."



A family doctor looks at new developments in the pharmaceutical industry. And he speculates on the future.

When I look back at some of my old records, I'm constantly reminded of the changes that have come about in medicine just during the past twenty-five years. Some of the diseases I treated and prayed over in the '40's are found mostly in medical history books now.

Thanks to drug research and development, we've made substantial gains in the control of cardiovascular disease, diabetes, malaria, mental illness, strep and staph infections, meningitis and a long list of ailments. It seems like only yesterday when a diagnosis of pneumonia was almost the kiss of death. Now, with modern medical techniques and drug therapy, we can offer some real help.

My records on polio, influenza and measles show an unbelievable trend for the better. New vaccines have reduced the toll of these age-old threats dramatically. And I see patients in pain from crippling arthritis helped with new medicinals unknown just a few years ago.

I hear questions about the three billion or so dollars spent by the drug industry in research during the past ten years . . . working on new and better drug products. It does seem like quite a bit of money to spend, and I realize some of it goes into dead ends. That's the problem with research, any research . . . you often don't know where you're going until you get there. I want all the tools I can get to help my patients. I want more drugs and more effective drugs. If they mean less pain, longer lives and more productive careers for those I treat . . . well, that's what really counts.

Another point of view . . . Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.

This advertisement has been reaching consumers thru THE ATLANTIC, FAMILY HEALTH, HARPER'S MAGAZINE, NEWSWEEK, SATURDAY REVIEW, TIME and U.S.NEWS & WORLD REPORT.



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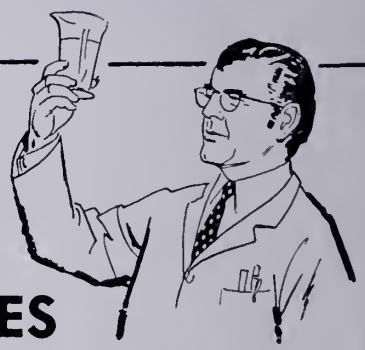
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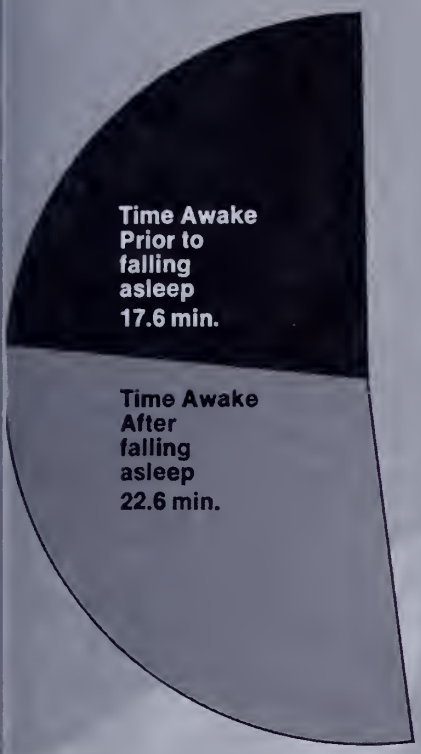
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required to fall asleep	33.6 min.	17.6 min.
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er of wakeful periods after et of sleep	12.2	8.4
sleep time	420.0 min.	447.5 min.
sleep percent	88.6	94.5

nical effectiveness as
ɔven in the sleep laboratory

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30-mg capsule h.s.—usual adult dosage.
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Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Nutley, New Jersey 07110

THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • December, 1971 • No. 6

Office of Publication

19 So. Jackson St. .... Montgomery, Ala. 36104

Subscription Price ..... $5.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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Who's afraid of the big bad enema?

We all are. But Dulcolax is the cure for enemaphobia. It can do almost anything an enema can – except look scary.

Just one suppository usually assures a predictable bowel movement in 15 minutes to an hour. Gone are the tubing, the "accidents", and the bruised egos associated with enemas.

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As with any laxative, abdominal cramps are occasionally noted. The drug is contraindicated in the acute surgical abdomen.

Dulcolax®...it's predictable

bisacodyl

President's Page



Archie E. Thomas, M. D.

Merry Christmas
and
Happy New Year

Archie E. Thomas, M. D.
President



Relieves stuffy and runny noses- promptly.
Makes your patient's world a little sunnier.

Triaminic®

phenylpropanolamine hydrochloride, pyrilamine maleate, pheniramine maleate

"the Sunshine Tablet"

Formula: Each timed-release tablet contains phenylpropanolamine hydrochloride, 50 mg.; pyrilamine maleate, 25 mg.; pheniramine maleate, 25 mg. **Indications:** Relief from such symptoms as nasal congestion, profuse nasal discharge and postnasal drip associated with colds, nasal allergies, sinusitis and rhinitis. **Precautions:** Patients should not drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease, or diabetes. **Side Effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Dosage:** Adults—one tablet swallowed whole, in morning, midafternoon and before retiring. **Availability:** In bottles of 100, 250.

Rx ONLY

Dorsey Laboratories, Lincoln, Nebraska, 68501

in cardiac edema

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Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

gets the water out

spares the potassium

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

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DZ-108

The Woman's Auxiliary

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Some New Year's Resolutions

I expect historians to designate this time in history as the "Age of Whys." Our teenagers have not cornered the "why market." In my travels over the state I've noticed many MDs, et al questioning policies and programs of MASA and AMA.

Timid souls are alarmed at all this why asking. Media report MDs as divided. Fortunately physicians are not timid souls and regard these questionings as healthy.

We've helped circulate the story that the only item any two doctors can agree on is that a third doctor is a son of a so 'n so. We laugh but we know all physicians are united in the foremost objective of keeping people healthy. Since MDs are non conformists (or they wouldn't tread daily where angels fear to tread), they differ only in the hows of keeping people healthy. Some even are so reticent to believe they shouldn't deal in politics.

President Nixon told the doctors of American medicine, "Some physicians feel they are so interested in their profession that they haven't time for politics. You had better become involved in politics or you won't have a profession."

Other MDs are comforted by the rumor that AMA has vast lobbies and spends fabulous sums to preserve the practice of medicine. The truth is AMA has four lobbyists and spent less than 30 cents per AMA member last year. How many lobbyists and how much money does business and industry have? AFL-CIO has 16 lobbyists. They have good causes, but they are not qualified to dictate health care.



Mrs. Gilder L. Wideman

I offer you three New Year's Resolutions.

1. I will make my opinions known about changes I believe should be made in MASA and AMA. (My opinions may be in the minority—in which case, I'll support the majority.)

2. I will support the elected leaders of MASA and AMA (even if I didn't vote for them and plan to vote against them if they run again).

3. I will do my share to further better medical care in and out of my office and hos-

(Continued on Page 414)



Still serving...

Miltown®
(meprobamate)

WALLACE PHARMACEUTICALS
Cranbury, N.J. 08512

(Continued from Page 413)

pital. (I will even run for office and serve on committees.)

If you've read this far, you're wondering why I dreamed up these resolutions. I didn't dream them up—your wives did. We want to stand with you in 1972—the year of health legislation. To stand with you—we wait for you to determine where you stand.

Frances Wideman
President

What Price Quackery?

Do mouthwashes kill germs? How effective are over-the-counter "TV" drugs for insomnia? Are there any real aphrodisiacs? What! No cavities? Precisely what is Medicredit?

Patrick J. Doyle, M. D., has written a health guide for the layman which doctors also will find helpful in answering for themselves and their patients scores of nagging questions that beset us all. His book is titled "Save Your Health and Your Money," published by Acropolis Books of Washington, in 240 pages including appendices and index, priced at $6.95 cloth, $3.95 paper.

In discussing chiropractic, he quotes the National Council of Senior Citizens: "Chiropractic treatment . . . is at best worthless." It is classified by AMA as a cult, and Dr. Doyle advises: "Avoid cultists like the plague."

In a single paragraph he defines a wide variety of plans and programs, lucidly, including Medicredit. A helpful glossary is sandwiched between the main text and an array of valuable appendices.

Evil men understand not judgment.

—Proverbs 28:5

In 1852 Alabama physicians believed malaria was caused by the State's heat, moisture and "superabundant" vegetation. They called upon planters to establish drainage systems and clear wilderness areas.

BLUE CROSS-BLUE SHIELD OF ALABAMA





If Nation's Health Is Government's Responsibility

A paternalistic government is coming more and more to interest itself in the health, education and welfare of its people. And the department of that name puts health first.

Wherein it takes over where medicine has had to go it almost alone for the life of this nation.

As a democratic country, this commitment to the bodily well being of the people is keyed closely to the pursuit of votes. Which is a good thing as it stirs the imagination of those departments, offices and individuals who live by votes alone.

For many years the more diligent Doctors of Medicine have been preaching on the evils of tobacco. Even before there were statistics to go by, they were warning little boys that smoking would stunt their growth.

It took such crusaders as Alton Ochsner, M. D., of New Orleans to raise the dread specter of lung, throat and lip cancer and tie it to smoking. Then when government finally awoke to the possibilities, it carried the fight on cigarettes to distances that medicine could never have carried it.

Back in the second decade of the 20th century, Tennessee pioneered in this field, outlawing "tailor-made" cigarettes. But the Volunteer State was half a century premature. It and the nation had first to learn through "the noble experiment" that prohibition almost never prohibits.

Taking an approach different from the 18th Amendment, government forced cigarette manufacturers first to label their product a "possible" threat to health, and then to go even further, the labels reading:

> "The Surgeon General has determined that cigarette smoking is Dangerous to your Health."

Going that far, it might be suggested that government take a closer look at quacks and cultists who have preyed too long on a gullible public. Already it has taken a dim view of extravagant claims of patent-medicine labels. Isn't the next logical step a closer look at such cults as chiropractic? As the prime protector of the people's health and welfare, isn't the failure of government to warn against such cults to be interpreted as tacit approval of them?

Medicine might well crusade for a law or a federal edict insisting that wherever the word Chiropractic or Chiropractor appears—in newspaper or billboard advertising, on office doors or windows—the following warning be used:

CHIROPRACTIC
MAY BE DANGEROUS
TO YOUR HEALTH

We have to defend the country against mediocrity; mediocrity of soul, mediocrity of ideas, mediocrity of action.

—Abraham Flexner





An Editorial

As many may remember

This the 12th month, named December,

Means the 10th month in the ancient Latin tongue.

But that language–dead, departed–

Didn't end up where it started.

Nor are we the same as back when we were young.

From the depths of rhyme and reason

Let us hope the Christmas season

Brings to every MASA family, large and small,

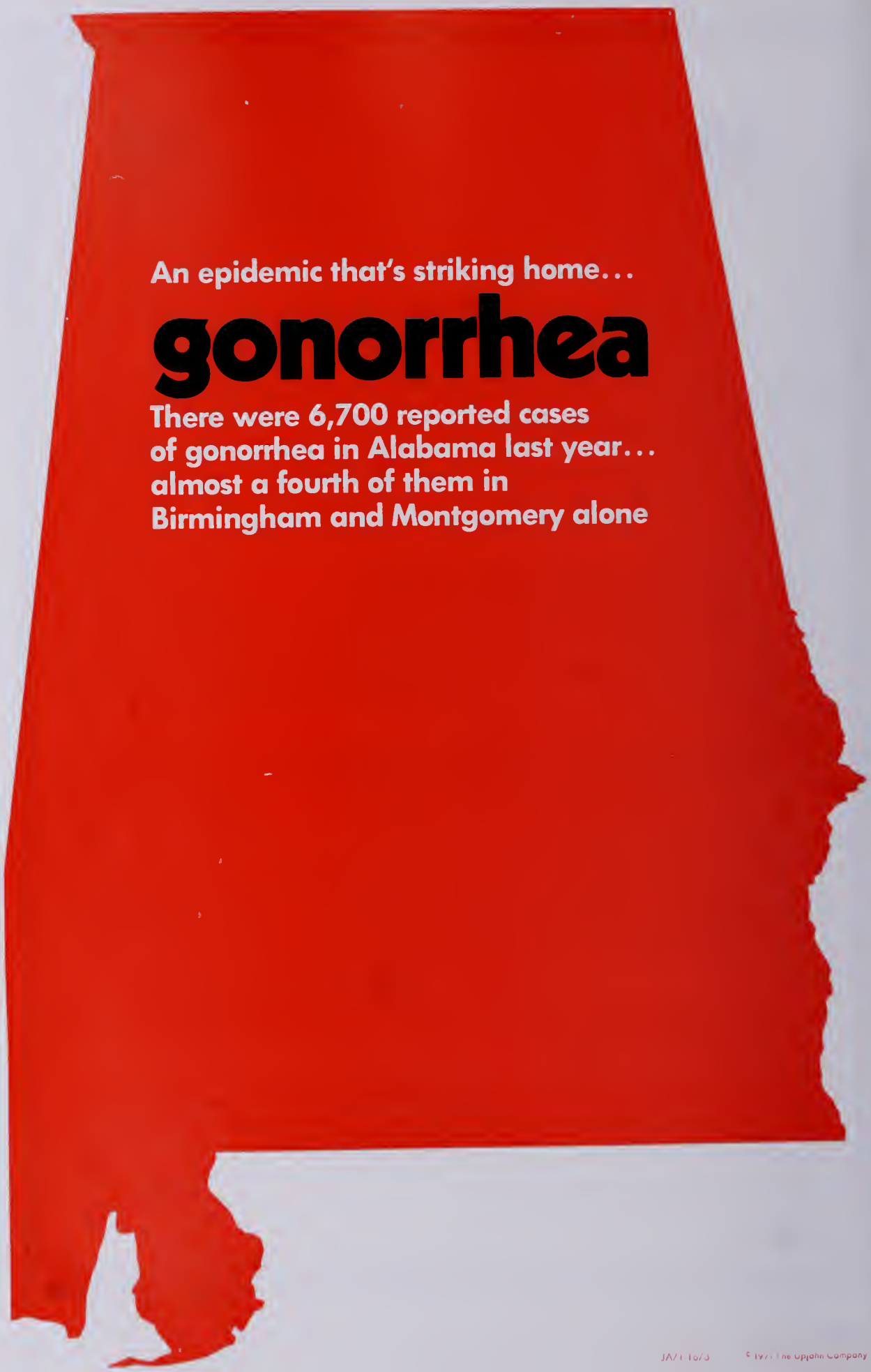
Health and comfort without measure,

Spiced with unfrustrated pleasure

And a modicum of leisure.

(signed)

Us All



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In Alabama...and everywhere else...
a new alternative

NEW Trobicin® SPECTINOMYCIN DIHYDROCHLORIDE, PENTAHYDRATE, UPJOHN

single-dose treatment for intramuscular use only

a chemically distinct antibiotic indicated specifically for treatment of acute gonorrhea:
in the male–acute urethritis and proctitis
in the female–acute cervicitis and proctitis
when due to susceptible strains of *N. gonorrhoeae*

High cure rate:*96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria for diagnosis and cure are defined on page 3 of advertisement)

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae *in vitro*
(M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour
(average serum concentrations of 15 mcg/ml present 8 hours after dosing)

NOTE: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

For full prescribing information, including contraindications, warnings and precautions, please see last page of this advertisement.

*Data compiled from reports of 14 investigators.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Trobicin and the gonorrhea challenge

An accelerating epidemic— a decelerating susceptibility to penicillin

Gonorrhea is now the most prevalent reported communicable disease in the nation. The estimated number of new cases of gonorrhea in the United States exceeded two million for the first time in 1970. To compound the problems, strains of *N. gonorrhoeae* increasingly resistant to penicillin and other antibiotics are appearing throughout the country. Schedules of treatment which were effective only a few years ago now result in a significant percentage of treatment failure. *In vitro* studies have demonstrated that resistance of *N. gonorrhoeae* may also develop to Trobicin.

Thus, while aqueous Procaine Penicillin G remains the drug of choice for the majority of patients, the need for a non-penicillin, intramuscular antibiotic for acute gonorrhea in the male and female is abundantly clear. Such an antibiotic should be effective following a single intramuscular injection —and it should not demonstrate cross-resistance with penicillin

Trobicin—a new alternative specifically for the treatment of acute gonorrhea

Trobicin is indicated in the treatment of acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

High cure rates: 96% of 571 males, 95% of 294 females

No allergic reactions occurred in patients with an alleged history of penicillin hypersensitivity when treated with Trobicin, although penicillin antibody studies were not performed.

Chemically distinct

Trobicin is structurally not related to any other antibiotic commonly used to treat gonorrhea.

The assurance of a single-dose, physician-controlled treatment schedule

Intramuscular injections should be made deep into the upper outer quadrant of the gluteal muscle.

Adult male: Single 2 gram dose I.M. in acute gonorrheal urethritis. Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in gonorrheal proctitis and in patients being re-treated after failure of previous antibiotic therapy. In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams intramuscularly is preferred.

Adult female: Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in acute gonorrheal cervicitis and proctitis.

Safety for use in pregnancy has not been established, nor has safety for use in infants and children.

Clinical Results with Single-Dose Treatment, Intramuscularly* (Data compiled from reports of 14 investigators**)

	Dosage	Number of Patients	Number Cured	Percent Cured
Adult Males: Gonorrheal urethritis	**2 grams** **4 grams**	**475** **96**	**457** **93**	**96%** **97%**
Adult Females: Gonorrheal cervicitis	**4 grams**	**294**	**280**	**95%**

Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin medium in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included in the table above.

The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

*4-grom doses were injected in two gluteal sites.

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oeae (MIC 7.5 to 20 mcg/ml). Defini-
ve *in vitro* studies have shown no cross
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months should be instituted if the diag-
osis of syphilis is suspected.

afety for use in infants, children and regnant women has not been estab-
shed.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae.*

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female— single 4 gram dose (10 ml) intramuscularly.

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GUEST EDITORIAL

What Is Stylish In Psychiatry Today?

There are many people involved in various kinds of "psychiatric treatment" today. Some have natural talent to offer and others have only been instrumental in tearing down the image of older proved treatment techniques in order to establish a "prestige" program, even though it is not very effective, but sounds great to nonprofessional people interested in psychiatry.

Every influential person in the field of mental health and professionals actively engaged in psychiatry should read an article entitled "Mental Hospitals, Prestige, and the Image of Enlightment" by Fischer and Weinstein, "Archives of General Psychiatry," July, 1971. This article quotes Dr. R. R. Grinker, who in 1963 wrote that psychiatry was "riding madly in all directions," and he counseled "a healthy skepticism about accepting without reasonable proof what is enthusiastically touted because it is new." The article goes on to describe the "prestige package" in psychiatric units of hospitals as follows:

1. Open door policy
2. Permissiveness
3. Team decisions
4. Patient government
5. No shock treatments

The authors think that this has resulted in a loss of diversity and flexibility needed to give optimal treatment to a varied patient population, and this has necessitated many to seek more effective care elsewhere.

While attending a week of review of current psychiatry recently at the Cook County Graduate School of Medicine in Chicago, I was gratified to hear from some of the faculty that somatic treatments are again becoming appreciated, particularly in view of recent research establishing more positively the biochemical role in mental illness. Also, they are heavily committed to the use of chemotherapy and are showing statistics supporting the fact that electroconvulsive treatment is by far the most effective technique in managing illnesses with a strong affective component.

There were younger psychiatrists and residents in the audience decrying the lack of instruction in somatic therapy in their training and who are planning to get this or have found, after several years of practice, that they need it. As one young psychiatrist stated, "Luckily, I have found an older man to teach this to me before all of that group, who really know how to do it, have died off."

James K. Ward, M. D.
Medical Director
Hill Crest Hospital
Birmingham, Alabama

*Requested editorial by the Alabama Medical Journal.

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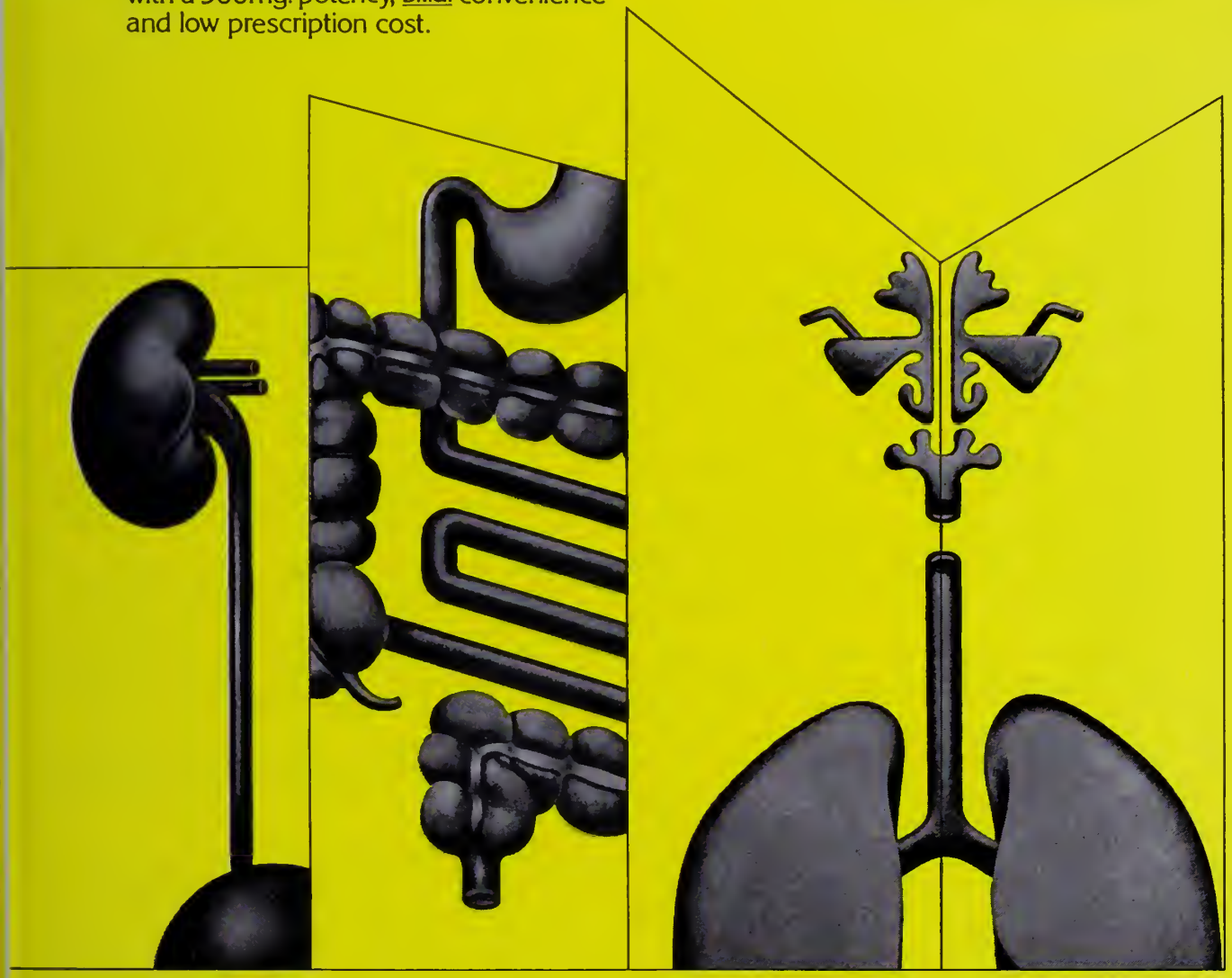
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Precautions: Mycotic or bacterial superinfection may occur. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for at least 4 months.

Plasma prothrombin levels may be depressed, patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, periodic laboratory evaluation of hematopoietic, renal and hepatic organ systems should be performed.

Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. Infants may develop increased intracranial pressure with bulging fontanels. Hemolytic anemia, thrombocytopenia, neutropenia, and eosinophilia have been reported.

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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

General Practice—

Age 49; University of Pittsburgh, 1951; seeking group or industrial practice. LW-3/1

Age 27; George Washington University 1969; National Board. LW-3/2

Internal Medicine—

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Age 31; University of Chicago, 1967; National Board; seeking group or associate practice; would prefer to work primarily as a general internist and part-time as an autopsy pathologist. Available July 1972. LW-13/7

Age 31; University of Kentucky, 1966; seeking group practice; Board eligible; Available July 1972. LW-4/11

Ophthalmology—

Age 30; Georgetown University School of Medicine, 1965; National Board. Available March 1972. LW-6/1

Age 35; Louisiana State University, 1963; Board eligible, seeking group or associate practice. Available January 1972. LW-6/3

Age 30; Yale University School of Medicine, 1965; National Board; Board certified; Available April 1, 1972. LW-6/5

Orthopedic Surgery—

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Age 31, Temple University, 1965; National Board; seeking group or associate practice. Available July 1972. LW-14/2

University of Illinois, 1965; National Board; seeking group or associate practice. Available July 1, 1972. LW-14/3

Age 53; Cambridge University, 1943; seeking solo practice. Available January 1, 1972. LW-14/4

Pathology—

Age 39; Ankara Medical School, Turkey, 1956; Board eligible; seeking associate practice. LW-8/2

Age 33; University of Santo Tomas, Manila, Philippines, 1962; Board eligible; seeking associate or institutional practice (teaching position); Available January 1972. LW-8/6

Age 33; University of Texas, 1965; National Board; Board certified; seeking group or associate practice; Available September 1, 1972. LW-8/7

Radiology—

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 37; Indiana University, 1960; Board certified, seeking associate practice. Available summer-fall 1971. LW-10/5

Age 31; Medical College of Georgia, 1966; National Board; Board certified; seeking group practice; Available August 1, 1972. LW-10/6

Age 31; University of Iowa, 1966; seeking assistant or associate practice; Available October 1, 1972. LW-10/8

Surgery—

Age 33; University of Maryland, 1965; seeking solo, group, or associate practice; Available July 1973. LW-11/7

Age 33; University of Tennessee, 1967; seeking practice in General Surgery. Available July 1972. LW-11/8

Age 48; Duke University, 1947; National Board; Board certified; seeking group practice in general surgery; Available July 1, 1972. LW-11/9

Urology—

Age 34; Medical College of Georgia, 1967; seeking group or associate practice; Available July 1972. LW-12/1

Age 32; Tulane University School of Medicine, 1964; seeking solo, group, or associate practice; Available April 1972. LW-12/2



Physicians Wanted

Special Openings—

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

Wanted, internists, generalists, radiologist, orthopedist, general surgeons, town of 15,000 population in county of 45,000 population in southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-17

Wanted: Immediately. Pediatrician to replace recently deceased partner in northeast Alabama. Enter busy practice in a predominantly GP area. Enjoy rural, quiet living with nearby scenic and recreational facilities. Salary, practice, everything negotiable. PW-19

Physician wanted. Student Health Service, University of Alabama. Eight full-time physicians. New facility. Competitive salary. Liberal vacation. Excellent fringe benefits. PW-20

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

Opportunity in town of 4,000 population in trade area of 50,000 population, located within 100 miles of two metropolitan areas in south Alabama. Industrial and farming area. 44-bed hospital. Office space and equipment available in new building with another physician. Several churches, schools, and service clubs. PW-1

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11

Opportunity for associate in general practice or take over general practice in town of 1,200 population in south central Alabama with trade area of 5,000 population. Well established practice and well equipped office. Located near recreational area. PW-1/12

Fathers and Sons in Medicine

The Finneys—A Son Follows In His Father's Footsteps

MASA's 1967 President James Owen Finney of Gadsden (presently of Birmingham) has joined the envied ranks of Alabama fathers-and-sons in medicine.

Like-father-like-son, the junior of that name is now serving his tour of military duty, stationed at Keesler AFB, Biloxi, Miss., with the golden oak leaves of a major on his shoulder. But prior to this, they had been together in Birmingham, the father as the Medical Center's Professor of Medicine and Associate Director of the Alabama Regional Medical Program for professional liaison, the son as Chief Medical Resident and Instructor in the Center's Department of Medicine.

If only the middle initial is used, James Owen Finney, Sr., becomes a junior. He was born in Florence, Ala., on Tuesday, August 20, 1907, the son of Mattie Moss (Smith) and James Oscar Finney. From the public schools of Florence he went to Vanderbilt for both his baccalaureate and M. D. degrees. He interned at Vanderbilt and at Chicago Lying-In Hospital, and practiced medicine in Gadsden from 1936 to 1967.

Dr. Finney was married to the former Margaret Pride of Florence and they have two children, Lane and James Owen Finney, Jr.

The son destined to follow his father into medicine was born on Thursday, Feb. 3, 1938, in Gadsden, and was graduated at 18 from the McCallie School, Chattanooga. As did his father, 30 years before him, young Finney earned his A. B. and M. D. degrees from Vanderbilt. The father became a Diplomate of the American Board of Internal Medicine in 1940; the son accomplishing the same 31 years later. Both are now members of MASA.

Eleven years ago the younger Dr. Finney was married to Pattie Perry Robinson of Birmingham, also a graduate of Vanderbilt, and they now have three of their own:—Margaret Carlisle, nine; Patti Perry Robinson, six; and James Owen Finney III, six months.



THE DRS. FINNEY, SR. AND JR.

Hobbies? The senior Finneys enjoy fishing and boating from their place on Guntersville Lake, and travel. Last summer they made a tour of Greece, Yugoslavia, Italy and Switzerland, and three months ago were on the American College of Physicians' tour of Ireland, Scotland and England.

Major Finney has multiple hobbies—bird hunting, fishing, golf and photography.

And just as the son is in service now, so was the father nearly 30 years ago. Dr. J. O. Finney, Sr., served his country in the Army Medical Corps for the duration of World War II, from 1942 to 1946.—W. J. M., Jr.

In their righteous wrath (with medicine today), many of today's critics seem to feel that limits of truth, balance, or plain good sense just don't apply to their holy cause.

—Harry Schwartz, Saturday Review

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Hobbies To Fill A Doctor's Leisure

> No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard.
>
> —Sir William Osler, 1909

Three Physicians Found Their Fun Behind The Footlights

Somewhere in Alabama there may be a surgeon who "carves in snow." An actor was once defined as: "an actor is a sculptor who carves in snow."

He is none of the three doctors who are subjects of this month's hobby feature. One in Jefferson is in general practice. Of the other two, both Montgomerians, one is a cardiologist, the other wears after his name in the roster of the Medical Association of the State of Alabama the descriptive four letters, OALR.

None is a native Alabamian or even a native Southerner. Two were born in New York, one in far-away Poland.

The latter is Samuel Leon Shafferman, younger of the three, who arrived in the land of Paderewski and Pulaski, Chopin and St. Stanislas on 18 August 1919, precisely one month to the day after the author of this piece returned from Europe and World War I.

But the future Birmingham practitioner was not long in the country of his forebears. Six months after his birth his parents brought him to "the land of the free and the home of the brave," which some may remember as a passage from a song.

They went straight from their immigration port to Atlanta, where he grew toward maturity, through the public schools, and to Emory University, from where he obtained his M. D. degree in 1943.

After interning in New York City Hospital and serving in World War II, he came to Columbiana, Ala., in 1947, and five years later to Birmingham, where he has been in active and general practice ever since.

Dr. Shafferman married a Birmingham girl, the former Faye Berman, and they have four children: the eldest, a daughter, who is herself the mother of three sons; two younger daughters, ages 11 and 8; and a 19-year-old son.

Dr. Shafferman is a Fellow of the Academy of Psychosomatic Medicine, a Fellow of the American Society of Clinical Hypnosis, and a member of the American Academy of General Practice.

His No. 1 hobby is the theater, an active participant in all phases of it, including set design, set construction, stage managing and acting. He designed sets for "Mary, Mary," "Cindy" and "Wait Until Dark." And he has had roles in such stage hits as "Guys and Dolls," "Kiss Me Kate," "Pal Joey," "The Odd Couple," and most recently the role of Lazar Wolf in "Fiddler on the Roof," from which his accompanying picture comes. He is also chairman of the art committee for the Jewish Community Center.

His other hobbies are painting, art collecting and, of all things (remembering the





ALABAMA MEDICINE has been well represented in the State's Little Theater programs. In upper picture are two Montgomery physicians who appeared in the same Moss Hart stage hit, "Light Up The Sky," an in-the-round production of some years ago. Top left is Dr. Rogers Nodine, while lower right is Dr. Julian Wishik . . . In the other picture is Dr. Sam Shafferman of Birmingham in his most recent role of Lazar Wolf in the play "Fiddler on the Roof."

opening sentences of this article!), metal sculpture. Before this piece appears in print, Dr. and Mrs. Shafferman will have returned from a vacation trip to Rome.

As for the other two doctors, the demands of their profession have shunted the stage into the background and into the past, but both look back wistfully and enthusiastically to nights before the footlights in the land of make-believe.

Julian Lawrence Wishik was born in New York City on Friday, 1 December 1911. Taking his pre-medical work at Columbia, he was graduated from New York State University's Medical College in 1937. Married to an Indiana girl, the former Mary Windhorst, they have two children, a 14-year-old daughter, now attending the Montgomery Academy, and a 25-year-old son, a helicopter pilot, with two tours of Vietnam duty behind him.

Among the plays in which Dr. Wishik has had roles are "Light Up the Sky" (an in-the-round play), "Night of January 16th" (presented in the old Montgomery Courthouse), and "You Can't Take It With You." For his current hobbies he lists fishing, golf, YMCA activities, jogging, calisthenics and photography, in that order.

The third member of this theater-hobby trio is Edwin Rogers Nodine, another New Yorker, who became interested in dramatics during his baccalaureate days at Columbia University. He received his M. D. degree from Tulane in 1925. He returned to New York for his internship, residency and early practice, coming back to Alabama in 1937. He moved to Montgomery from Andalusia in the midst of World War II, promptly affiliating with the Little Theater.

Some of the plays in which Dr. Nodine—a specialist in Ophthalmology, Otology, Laryngology and Rhinology—has had parts are "Come Back Little Sheba," "Light Up The Sky," "The Night of January 16th" (in the latter two with the other Montgomery subject of this sketch), "Yes, My Darling Daughter," "Portrait in Black," "Auntie Mame" and "The Emperor's Clothing." In 1958 he directed the play, "George Washington Slept Here."

"I was never a John Wayne or a Clark Gable," Dr. Nodine confessed, "but it was a most enjoyable experience . . . and rewarding."

Dr. Nodine lost his only son, Jack, an Air Force flier, in an air crash. His first wife died several years ago. But there are two grandchildren, Nancy and John Nodine. His second marriage was to Ophelia Wilson of Fayette, Ala., a widow with three sons.

—W. J. M., Jr.



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THE JOURNAL
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THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA
Published Under the Auspices of the Board of Censors

Volume 41 December, 1971 Number 6

Conversational Nuclear Medicine

PART I

By Yogendra Goel, M. D.*
Birmingham
And
Robert E. Foy, Jr., M. D.
Enterprise

Another medical specialist is being born. The new specialist in the birth canal of the AMA Council on Medical Specialist is in the field of Nuclear Medicine. What is the purpose of this specialist? What does he do? What does he know? How can he help me with my patients? An attempt will be made to answer these questions in the ensuing paragraphs. No attempt will be made to justify the existence of this new infant specialist. Only enough information will be offered so that the reader will have some introduction to the language and possible benefits of this new specialist. If the reader desires more than the ability to employ this new specialty or to converse with this new specialist, then stop now and advance to the nearest textbook on the subject.

On July 28, 1971, the American Board of Nuclear Medicine was incorporated. This was approved by the proper authorities of the AMA. It is a conjoint board of the boards of internal medicine, pathology, and radiology. As would be expected this new board is sponsored by the Society of Nuclear Medicine.

The first certifying examination is to be given in March, 1972, by the National Board of Medical Examiners. The examination is to evaluate the applicants' knowledge and competence in clinical nuclear medicine. According to Merrill Bender, of the American Board of Nuclear Medicine, Inc., applicants will be evaluated on their knowledge and competence in the following subjects:

Imaging procedures, in vitro test, in vivo function studies, nuclear medicine therapy, medical nuclear physics, radiation biology, radiation protection, nuclear medical instrumentation, and radio pharmacology. Since the examination is going to consume only seven and one-half hours, the applicants are going to have to be speedy demonstrators of their knowledge and competence.

Now that the new specialist's realm of knowledge has been thoroughly explained, let us turn to the question "what does he do?" In general he is the ultimate responsible party in providing beneficial information to the physician about his patient or providing beneficial treatment to his patients. The nuclear specialist is another hospital based specialist. He is the complete director of the nuclear medicine laboratory of the hospital. His authority in this capacity should not be encroached upon nor diluted by any one. This is a most important concept for the medical staff, hospital administration, and board of directors of the hospital to envisage. In this dictum of medicine as in others there can be no fulfillment of responsibility without competent authority. The

*Acting Chief of Nuclear Medicine, University of Alabama School of Medicine, Birmingham.

licensing law of the Federal Government, which controls radioisotopes, understands this, for in general, physicians are licensed to control isotopes not hospitals.

By far most of the time of a nuclear medicine laboratory is spent in field diagnosis or information gathering. In practice this information gathering divides itself into two general areas. One is commonly referred to as "wet lab procedures." This is closely related to clinical pathology. Thyroid function testing (T_3 and T_4), Schilling test, blood volume test, and radioimmunoassay fall into this category. The peculiarity of this division of nuclear medicine that makes it most unusual is its ease of accuracy with very minute amounts. If one remembers that the largest unit calibrated in nuclear medicine is the atom, then the concept of an accuracy previously not obtainable is not too difficult. Without this accuracy immunoassay would not be possible.

By far the busiest division of nuclear medicine is that of the imaging devices laboratory. Imaging devices provide a pictorial display of various organs such as the liver or brain or they may provide a pictorial display of physiologic function such as cerebral blood flow. In general all imaging devices display in a pictorial fashion the manner in which a radioisotope is deposited in or traverses through the area of the patient that is of interest. Normal and abnormal images are known by the nuclear medicine specialist. He then correlates the image obtained with the disease possibilities. This is the ultimate output of the nuclear medicine specialist. This ultimate output is the least time consuming of his many responsibilities.

There are two general types of imaging devices. One is the rectilinear scanner which passes over the isotope laden organ or area of interest and records the amount of activity in an anatomical graph. This is the first successful instrument. Its greatest drawback remains the long time required for relative immobility of the patient or part. Dynamic studies cannot be done with this instrument. In general the patient must remain immobile for three or four ten minute periods or the "scan" cannot be done. It does provide better pictorial resolution than the other common newer instrument the "gamma camera." This latter instrument provides display of radioactivity over a relatively large area in a much shorter time. It is necessary for almost any type of study in which there is movement, such as a study of cerebral blood flow. Until recently the resolution of its display has not been as desirable as that of the rectilinear camera, however, with a tomographic device the resolution is much improved.

All imaging devices only record energy given from the administered radioisotope. Placing the radioisotope in the organ or area of interest is done by knowing the functioning pharmacology of the organ and binding the proper isotope to the proper carrier so that the blood stream (in most cases) will deliver the isotope to the organ of interest. It is in the field of radiopharmacology that great advances have been made. It is in this field that the greatest hope lies.

At current time by far the most widely used isotope is the daughter product of 99 Molybdenum known as 99m Technetium. This isotope has excellent physical properties. Its short half-life of six hours reduces the absorbed radiation dose to the patient to a most acceptable level. The energy level of 140 Kev is most acceptable to all imaging instruments now in use. The 99m Technetium is obtained in the nuclear medicine laboratory by flushing or eluting saline through a purchased 99 Molybdenum "generator." This is a relatively simple procedure with little risk or hazard. This is referred to as "milking" the "generator." In most circumstances the "generator" is "milked" each A. M. and enough sterile 99m Technetium is obtained to last the whole day. If necessary the generator can be "milked" again in the afternoon but its output will be less. The half-life of a generator is 67 hours, so a new generator is usually purchased each week. It is the convenience and availability of the 99 Molybde-

num generators that has made nuclear medicine imaging an economically feasible procedure. Other nuclides have to be bought as needed and this makes them relatively expensive. However, the expense involved in nuclear medicine procedures can be completely justified on the basis of excellent, otherwise unobtainable, information gained and absolutely no mortality or morbidity associated with these procedures.

Rural jargon is most common in nuclear medicine. Technetium is "milked" from a small container which is always referred to as a "cow." This "cow" is kept in a lead enclosure called a "barn." Isotopes are transported in a small lead container called a "pig." Nuclear medicine has its idiosyncrasies too.

No conversation in nuclear medicine would be complete without some mention of radiation protection to the patient and to the operating personnel. It can be taken as a good rule of thumb that the radiation received by the patient in a nuclear medicine procedure is significantly less than would be received in an X-ray examination of the same part. For instance, the radiation to the patient in a brain scan is several times less than the patient would receive during a carotid arteriogram. In this instance operators are equally well protected.

This ends Part I of "Conversational Nuclear Medicine." In Part II individual procedures and the helpful information they can provide will be discussed. This part will answer the question, how can nuclear medicine help me with my patient's illness.

Hereditary Disease Can Be Diagnosed in Fetal Period

Techniques for prenatal diagnosis of hereditary and congenital diseases have been developed and are being clinically applied by a research team at the University of California's San Francisco Medical Center.

The method involves obtaining a sample of the pregnant woman's amniotic fluid, culturing the fetal cells thus obtained, and then karyotyping (which is systematically arranging the chromosomes from a single cell so that they can be individually visualized and studied for abnormalities). In this manner, a growing number of disorders are being identified before birth, the optimal time being between the 12th and 16th week of fetal gestation. This permits the pregnancy to be safely terminated if a fetal chromosomal abnormality is found.

Several months ago, these investigators were also able, for the first time, to diagnose *in utero* Niemann-Pick disease, a metabolic disorder characterized by early degeneration of the brain and nervous system. There was in this family the history of a prior birth and subsequent death of a child with the same defect. Amniocentesis, cell culture and enzyme assay determined that the fetus was affected and the pregnancy was terminated. Pathological examination of the fetal tissues confirmed the earlier diagnosis.

Other indicators for the use of amniocentesis are women at risk of having a child with a chromosomal abnormality either because of advanced maternal age or a previous abnormal child; or women who are known carriers of an X-linked (sex-related) abnormality. In such cases, a male child would have a 50 per cent risk of being affected while a daughter would, at worst, be only a carrier. Patient examples studied by this team were carriers of: (1) Hemophilia B (Factor IX deficiency); and (2) Duchenne muscular dystrophy. Amniocentesis found, in both cases, that the fetus was a male and the pregnancies were terminated. (Principal Investigator: Louis K. Diamond, M. D., and Associate Investigator: Charles Epstein, M. D.)

The John A. Hartford Foundation, Inc. Bulletin, Oct. 1971.

Medical Ethics

F. M. Phillippi, Jr.
Brewton, Alabama

Gentlemen, standing before you is no grand old man of medicine nor one from any ivory tower. I am only a small town physician. I am certainly no expert on this subject. But this is an extremely important subject. To cover the subject adequately would require a full day. I wish to talk with you briefly on what I consider a few of its important aspects.

First, before time expires I would recommend that you write the AMA Judicial Council and ask for this booklet, "Opinion and Reports." Also, I would recommend that you obtain the September, 1963 issue of Medical Economics, this entire issue being devoted to and titled "Are You Sure You Know What's Ethical?"

I will not recite the "Principles of Medical Ethics." They are divided into ten sections. They are not laws but standards by which the physician may determine the propriety of his conduct in his relationship with his patients, his colleagues, with members of allied professions and with the public.

The prime objective of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. In the "Principles of Medical Ethics" there is not one provision to further the selfish or personal end of the physician. One of the strongest holds of our profession on public approbation and support is that age old professional ideal of medical service to all whether able to pay or not.

We should charge reasonable fees appropriate to our training and experience. We should insist that reasonable and legitimate fees be paid. If we do not, we lose patient respect and we also lose patients. We should never charge an exhorbitant fee. Nothing creates distrust and degrades the image of medicine as does this infrequent practice. Peer review will do much to discourage this practice. If you should find that this is occurring in your community, it is your ethical duty to prevent this not through loose talk but through proper medical channels.

The AMA House of Delegates has said "A physician should not dispose of his professional services to any hospital, corporation or lay body by whatever name called or however organized under terms or conditions which permit the sale of his services by such agency for a fee." It further added, "Where a hospital is not selling the services of a physician, the financial arrangement, if any, between the hospital and the physician may be billed on any mutually satisfactory basis."

Medical ethics specifically dictate that you not professionally associate with other practitioners of the so-called "Healing Arts." If it should be necessary for you to refer a patient to such an individual such as an optometrist or a physiotherapist, you must be sure that the patient understands these practitioners' limitations and that they do not have the broad knowledge of the physician.

I feel certain that all of you know that you should not associate with a cultist professionally, socially or otherwise. When your patient attempts to tell you he has been to a chiropractor, I think you should interrupt him and inform him that if he wants to consult a cultist or fortune teller, that is his business but that you do not care to hear about it. To further criticize the chiropractor would be beneath your dignity and would place you in a defensive position.

From the ethical point of view it must be remembered that the physician must assume total responsibility for the care rendered his patient. Physicians should not permit

Presented at the Orientation Program during the 1971 Annual Session at Birmingham, Alabama.

inadequately trained personnel to perform those acts which either legally or traditionally are considered to be the practice of medicine. The use of ancillary personnel as ancillary personnel is one thing, but the use of such personnel as independent practitioners capable of making professional judgments is something else entirely different both legally and ethically.

I do not understand how our profession can justify on ethical grounds the training and employment of the Medex or Physician Assistant. Yet this is just what our starry-eyed health planners are attempting to do.

In my opinion the personal satisfaction you get from the practice of medicine will depend on the type of relationship you have with your colleagues. You should feel more comfortable among members of your profession than with any other group. The physician who cannot count a few of his colleagues as among his closest personal friends needs to do some soul searching.

Sir William Osler, perhaps the most respected physician of all times, often stressed that quality which he termed imperturbability. Imperturbability means coolness or presence of mind under all circumstances, coolness amid storm, clearness of judgment in moments of grave peril. It is the quality which is most appreciated by the laity and the physician who has the misfortune to be without it, who betrays indecision or worry and who shows that he is flustered in ordinary emergencies loses rapidly the confidence of both his patients and his colleagues.

Imperturbability does not imply arrogance. We should always show genuine humility. We should manage our patients as we would expect members of our own family managed. We should realize our limitations and never undertake treatment or procedures for which our training is inadequate. We should seek consultation freely whenever we think it is in the best interest of the patient and whenever requested to do so. We should always keep the interest of the patient in mind in selecting consultants, and we should select those consultants on the basis of their medical qualifications rather than on the basis of personal friendship.

Those of you who want a consultation practice must be prepared to write letters. Telephone reports are fine, but there must be a written report. It does not have to be lengthy. It should be sent promptly. Medical ethics in regard to the proper method of handling consultations in regard to office and hospital consultations becomes quite involved, and time will not permit me to discuss this. This is discussed in great detail in the September, 1963 edition of Medical Economics.

If I have stressed nothing else, I would like to stress one thing, and that is we should never, never criticize another physician in dealing with our patients. We cannot do this. It lowers the image of our profession. This is really a cowardly act. The physician who does this either by spoken words or by facial expressions may find himself in the embarrassing position of being called to the witness stand to explain his remarks or actions. Unfortunately it is my understanding that a large majority of malpractice suits come about or are initiated by this means. The really conscientious and ethical physician is not likely to become involved in malpractice suits.

I would recommend that you become actively involved in your medical societies. You must do considerably more than just pay your dues. I have no patience with those who do not support the AMA. When I ask these people why they feel this way, they usually reply that they are against the AMA because the AMA was unsuccessful in its fight against socialized medicine. They are dead wrong. The AMA did not fail. We failed because we at the grass roots were unorganized and ineffective.

We physicians with our heritage of professional ethics have an obligation to our patients, to ourselves, and to our profession to know, understand, appreciate, and observe the Principles of Medical Ethics. To the ex-

tent that we neglect this obligation we will continue to force all manner of questions and complaints regarding the proper discharge of our duties. But if we discharge this obligation with earnestness, sincerity, and zeal, it will be granted to us to enjoy life and the practice of the art, respected by all men at all times. This is all we seek but could we seek anything less?

Alcohol and Marihuana

Man has always sought a surcease from his memories. The beverages that have endured through the ever lengthening past are those that affect the central nervous system such as the array of alcoholic drinks, coffee, tea, and other caffeine-bearing beverages. The intensity of this desire was demonstrated by the complete failure of the National Prohibition Act.

Now, a new actor has appeared in force on the American stage in the form of the marihuana cigarette . . .

Since the use of either . . . stems from the same basic desire of man to escape from or to insulate himself from reality, it is likely that those in whom the urge is strongest will resort to both escape mechanisms . . . It is imprudent to advocate the use of marihuana in place of alcohol. Alcohol appears to be here to stay. And, if marihuana is legalized, it is probable that "in addition to alcohol," rather than "in place of alcohol," will more accurately describe the escape means of many."

—from article by John C. Krantz, Jr., Ph. D. in CMD (Current Medical Dialog)

Nature knows no pause in progress and development, and attaches her curse on all inaction.

—Goethe

HASP To Save Illinois Millions

The Illinois Medical Society and State Health officials have signed an agreement establishing a new health care monitoring program designed to save that state $12 million annually, hailed by Gov. Ogilvie as a major part of his sweeping welfare reform.

The Hospital Admission and Surveliance Program (HASP) aims at preventing unnecessary use of hospital services. To be implemented Jan. 1, 1972, the plan will operate in four general areas, as follows:

1) Physicians will control the time public aid recipients stay in hospitals.

2) Physicians will also certify the need and types of services required by persons placed in nursing homes.

3) The care provided to welfare patients during hospitalization will be continually monitored.

4) Hospitalization review committees will seek ways to improve the services delivered to all hospitalized patients, not only to welfare patients.

I am all in favor of a vigorously critical attitude towards technological innovation; we should scrutinize all attempts to improve cur condition and make sure that they do not in reality do us harm; but there is all the difference in the world between informed and energetic criticism and a drooping despondency that offers no remedy for the abuses it bewails.

—Sir Peter Medawar.

It does not take great men to do great things; it only takes consecrated men.

—Phillips Brooks

The fate of nations depends on how they are fed.

—Brillat-Savarin



Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Many patients on special diets will find soups they can enjoy among the more than 50 different varieties available.



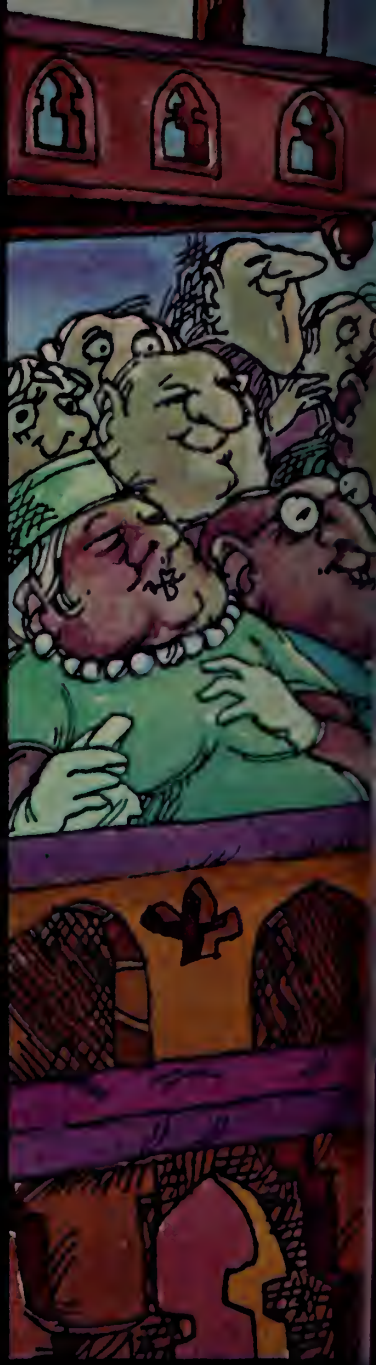
Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

When diarrhea wrings the wedding belle...



It's all very well to counsel patience in diarrhea patients. There are times when relief of symptoms can't come too soon.

X-ray studies[1] in 16 normal subjects showed just how promptly the active ingredient in Lomotil does its work.

Lomotil retarded gastrointestinal motility particularly during the first three hours after administration. It continued its moderating action on the bowel for at least three hours more.

Physicians prescribe Lomotil more often than any other drug when the urgency for the control of diarrhea is most distressing.

1. Demeulenaere, L.: Action du R 1132 sur le transit gastro-intestinal, Acta gastroent. Belg. 21:674-680 (Sept.-Oct.) 1958.

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Each tablet and each 5 cc. of liquid contain:
Diphenoxylate hydrochloride . . 2.5 mg.
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Atropine sulfate . . . . . 0.025 mg.

Saves the Day

Warnings: Lomotil should be used with caution in patients taking barbiturates and, if not contraindicated, in patients with cirrhosis, advanced liver disease or impaired liver function.

Precautions: Lomotil is classified as a Schedule V substance by Federal Law with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving addicting drugs. Recommended dosages



should not be exceeded, and medication should be kept out of reach of children. Signs of accidental overdosage may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia; continuous observation is necessary. The subtherapeutic amount of atropine sulfate is added to discourage deliberate overdosage.

Adverse Reactions: Side effects reported with Lomotil therapy include nausea, sedation, dizziness, vomiting, pruritus, restlessness, abdominal discomfort, headache, angioneurotic edema, giant urticaria, lethargy, anorexia, numbness of the extremities, atropine effects, swelling of the gums, euphoria, depression and malaise.

Overdosage: The medication should be kept out of reach of children since accidental overdosage may cause severe, even fatal, respiratory depression.

Dosage: The recommended average initial daily dosages, given in divided doses until diarrhea is controlled, are as follows:

Children:

3-6 mo....½ tsp.* t.i.d. (3 mg.)
6-12 mo....½ tsp. q.i.d. (4 mg.)
1-2 yr....½ tsp. 5 times daily (5 mg.)
2-5 yr....1 tsp. t.i.d. (6 mg.)
5-8 yr....1 tsp. q.i.d. (8 mg.)
8-12 yr....1 tsp. 5 times daily (10 mg.)
Adults:....2 tsp. 5 times daily (20 mg.) or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

Use of Lomotil is not recommended in infants less than 3 months of age.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

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Regional Medical Programs In Alabama

John M. Packard, M. D., Birmingham

The Alabama Regional Medical Program has defined three goals: to provide retraining and continuing education for health personnel by local demonstration of recent developments in medical care; to increase the supply of health care manpower and improve distribution and use; and to involve the entire community in the problems of modern health care and their solution. A wide variety of activities have achieved significant success.

The Alabama Regional Medical Program was organized in 1967 to improve patient care throughout Alabama, especially for patients with heart disease, stroke or cancer. A regional advisory group of 62 representatives from all areas of the state determines policies. Over half of its members are physicians, nurses, hospital administrators, and other health professionals; the remainder are laymen, including educators, students, businessmen, and government officials. Fiscal and administrative responsibilities are maintained by the University of Alabama in Birmingham, which includes the only schools of medicine, dentistry, optometry, and health services administration located in the state.

The principal objectives of the Program are (1) to provide retraining and continuing education for the entire health service team by demonstrating recent developments in medical care as close as possible to the patient's home and the physician's practice, (2) to stimulate and support the creation of new health service manpower and to improve distribution and use throughout the Region, and (3) to increase and improve total community involvement in both the problems of modern health care and their solution. These three programs fit into the conceptual scheme for comprehensive health care systems proposed by Kissick.[1]

Methods

The Alabama Regional Medical Program assists established groups to achieve a common goal. Thus staff members act as consultants in special fields, resource persons, writers of grant requests, conveners of meetings, facilitators of activities, and "brokers" to find other sources of assistance when Program activities are not applicable.

A problem-solving approach, applicable

Reprinted from Postgraduate Medicine, Vol. 49, No. 2, February 1971, © McGraw-Hill, Inc.

equally to care of the individual and of the population as a whole, has proved useful. This process of regionalization includes (1) involvement, (2) identifying problems, including conflicts and fragmentation as well as needs, (3) assessing resources, (4) defining objectives, (5) setting priorities, (6) implementing plans, and (7) evaluating results.

The staff has spent a great deal of time in the first three areas. Steps 4 and 5 have been expanded by establishing six subregional offices to develop areawide comprehensive health-planning councils and by adding health planners to established councils. The regional advisory group periodically revises or reaffirms Regional objectives and priorities, considering subregional needs.

The core staff has implemented step 6 by encouraging appropriate activities by other agencies or groups, supplemented by approved and funded projects. The success with projects has been poor, leaving gaps in proposed plans, and project development itself has been costly. Step 1 has evolved slowly as only four projects have been formally evaluated; however, methods to evaluate programs and the quality of medical care are now being developed.

Progress

A brief discussion of the three major program areas will illustrate the progress in improving health care in Alabama.

Education—There are now two courses for training coronary care nurses, one in a community hospital in Mobile, and the other sponsored by the Alabama Heart Association with clinical instruction provided by seven cooperating hospitals in Birmingham. To date, these courses have graduated 146 registered nurses, 98 licensed practical nurses, and 50 students.

Small hospitals that are installing monitoring equipment but cannot spare even one nurse for extended training in Birmingham or Mobile benefit from courses using ROCOM™ multimedia instructional units. Nine of these units, donated by the Liberty National Life Insurance Company, Birmingham, are rotated among the larger hospitals where qualified personnel instruct all nurses within commuting distance.

Another project, only partially funded, provides medical information for Alabama health care providers by means of toll-free telephone lines to the Medical Center of the University of Alabama in Birmingham, where specially trained operators refer the calls to senior faculty. This service provides an immediate answer to problems in management, and often pertinent library material is sent to the caller. During the first 18 months of service, 4,441 calls were received and the faculty made 6,460 follow-up calls.

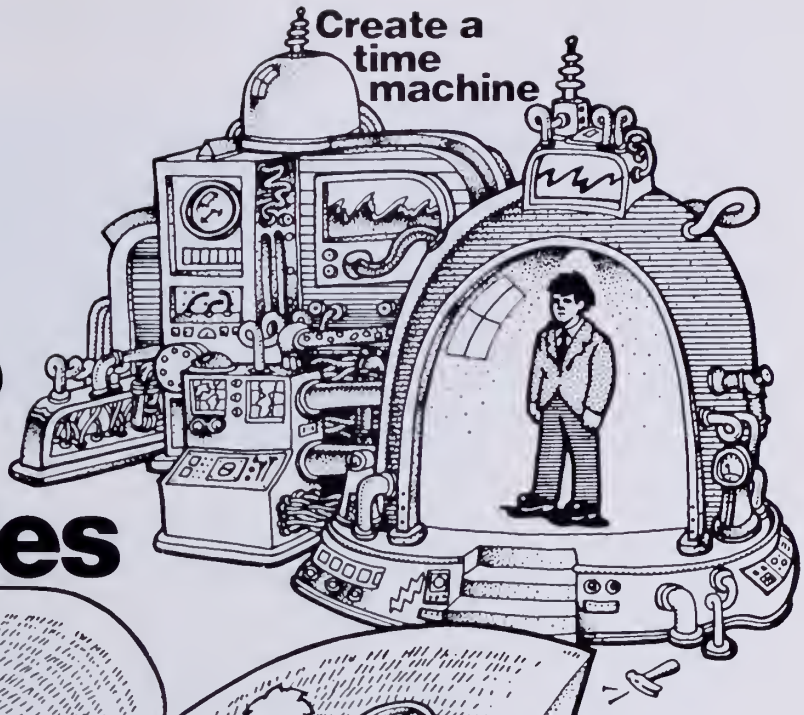
In addition, the Program has supported over 70 courses in continuing education provided by the University of Alabama in Birmingham during the past year by partially financing salaries, underwriting travel and seminar expenses, and publishing and distributing program announcements; staff members have served on program committees and appeared on programs. In-service education programs in community hospitals have benefited from core staff advice and loan of audiovisual materials. The Program has also cooperated with many volunteer and public agencies in their continuing education endeavors and is actively working toward a coordinated program for Alabama's allied health professionals.

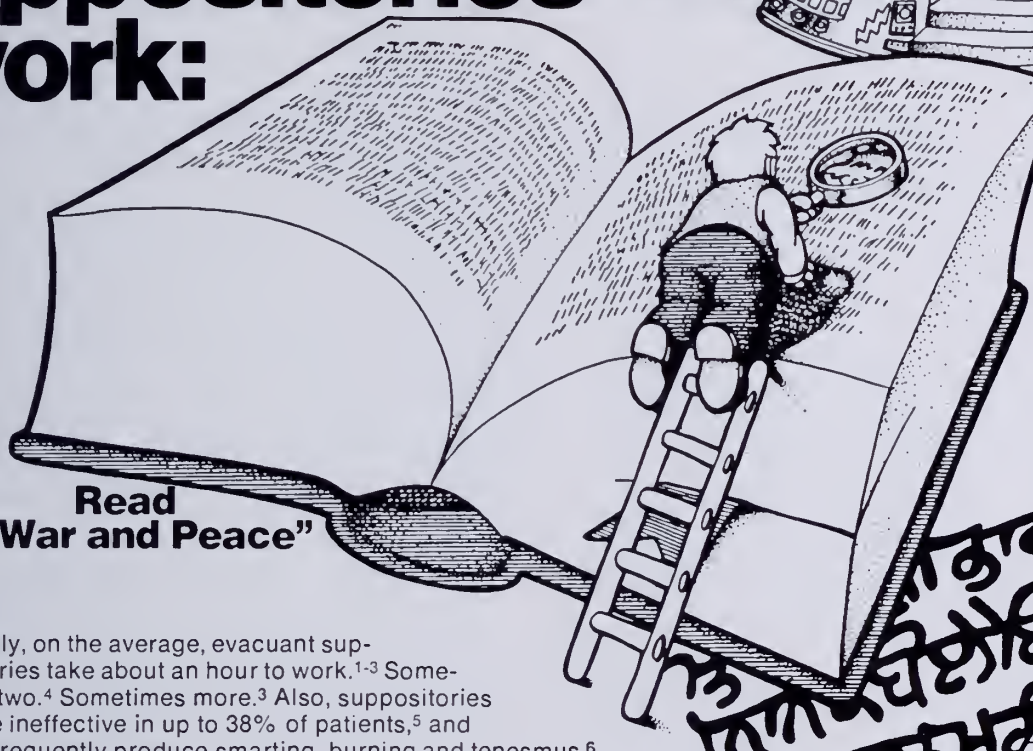
A course in instructional strategy, under the direction of the Center for the Study of Medical Education, University of Illinois College of Medicine, Chicago (under a Regional Medical Programs contract), is available to all interested physicians, dentists, nurses, and allied health personnel. Hopefully, a project with the University of Alabama School of Medicine in Birmingham using community hospitals for training students in these professions will not only stimulate practitioners, but also will perhaps influence students to select less urban areas for practice.

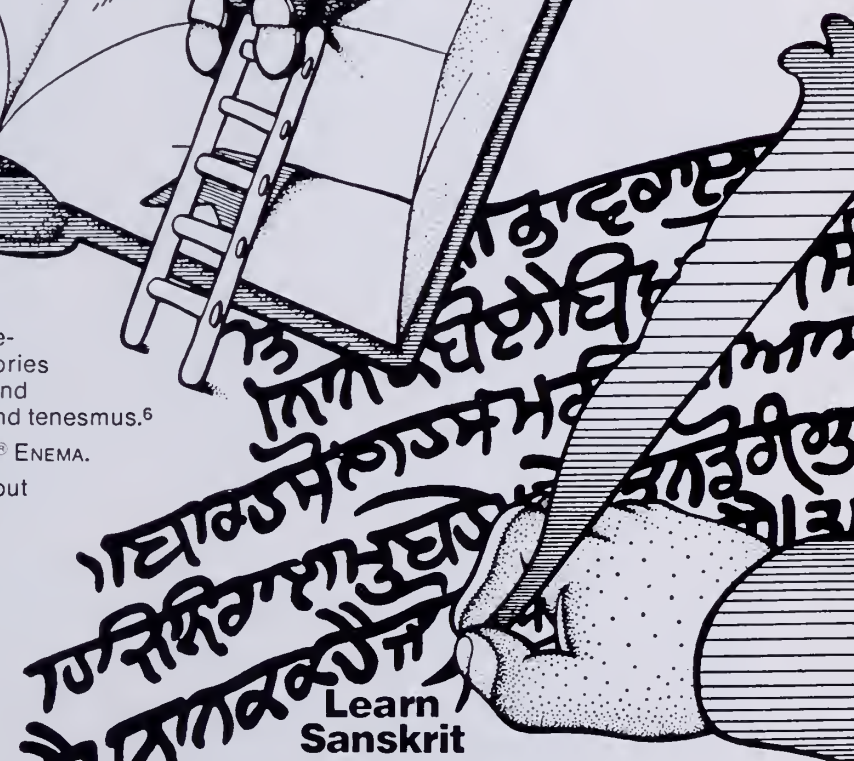
Manpower—The health needs of Alabama

(Continued on Page 444)

What to do until suppositories work:







Actually, on the average, evacuant suppositories take about an hour to work.[1-3] Sometimes two.[4] Sometimes more.[3] Also, suppositories can be ineffective in up to 38% of patients,[5] and not infrequently produce smarting, burning and tenesmus.[6]

Alternative to the long unpleasant wait: FLEET® ENEMA.

FLEET ENEMA works within 2 to 5 minutes without pain or spasm. FLEET ENEMA induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool. FLEET ENEMA avoids the irritation common with soapsuds enema. And FLEET ENEMA is leakproof: a rubber diaphragm at the base of the prelubricated tube prevents seepage and controls the rate of flow, assuring comfortable administration.

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Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present. **Caution:** Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

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(Continued from Page 442)

are most evident in the severe shortage of all categories of health manpower, complicated by maldistribution and a constantly diminishing number of general practitioners. Recruitment is basic to the solution. The Program has received approval and funding for two significant projects. One provides junior college training and remedial education for disadvantaged students in nursing or training as medical records librarians. The other project establishes a consortium of the 17 junior colleges to provide initial core curriculum for allied health personnel who will receive their clinical training at the Regional Technical Institute, a component of the Medical Center of the University of Alabama in Birmingham. These projects conserve the scarce supply of clinical faculty, and since the students return to their own junior college for graduation, encourage them to find employment in their home area.

The staff of the Alabama Regional Medical Program has also aided in establishing the Division of Family Medicine and Ambulatory Care and in the proposed renovation of outpatient facilities at the Medical Center. In addition it has supported the administration of the University of Alabama Medical School, Birmingham, in a proposal to shorten the curriculum from four to three years and to double enrollment by 1973. The director of the Alabama Regional Medical Program serves as consultant to the medical education committee of the University of Alabama in Tuscaloosa, now studying the possible creation of a medical school on that campus.

The Program has played a role in establishing programs for surgeon and physician assistants and is active in efforts to educate physicians, nurses, and the general public in the role of these assistants and to obtain the necessary legislative changes. In addition, the associate director for education has served as consultant to state colleges and universities expanding their health programs. It is hoped that these activities, in cooperation with the Regional Technical Institute, will stimulate new careers such as enterostomal therapists and pharmacist assistants.

Medical services—The regional advisory group has placed a high priority on improving emergency medical service, focusing on improved emergency care to the cardiac patient. The Program has cosponsored three statewide seminars for ambulance attendants, has supported the Regional Technical Institute in courses for ambulance attendants, and has worked with state and local organizations to prepare a bill for the state legislature to upgrade ambulance attendants to emergency medical technicians. A core staff member attends meetings of Birmingham's emergency medical service committee and has been involved in establishing a radio network among ambulances, hospitals, and fire and police departments.

In association with the Alabama Heart Association, the University of Alabama in Birmingham, and three community hospitals, the Program has formed a committee to improve prehospital coronary care, funded a feasibility study to equip ambulances with electrocardiographic telemetry, and is collecting base-line data on treatment of heart patients.

At the Medical Center, the Program director has chaired a combined committee from the University and Veterans Administration hospitals to standardize resuscitation equipment, establish cardiac arrest teams, provide a course in cardiopulmonary resuscitation for incoming house staff and a course for nurses, and equip a self-teaching room with audiovisual aids and a donated Arrhythmia Resusci-anne. Program staff and cardiac fellows have given the course in resuscitation to community hospital physicians and nurses; the course will be expanded by the Alabama Heart Association's closed-chest cardiopulmonary resuscitation program.

Program staff members have acted as consultants in planning coronary care units throughout the state and have arranged for transmission of electrocardiograms from the

(Continued on Page 446)



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Medical Director

Maj. Gen. (ret.) Howard Snyder
Administrator

THE BRADLEY CENTER, INC.
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(Continued from Page 444)

Appalachian Demonstration Area to the University of Alabama Hospitals and Clinics, Birmingham. Testing devices for coronary care unit equipment have also been secured. A coronary care unit training course for registered nurses and licensed practical nurses has been operational in Birmingham since April 1969 and will terminate its Program sponsorship in March 1971; a second course to include nursing students began in Mobile in April 1970; a third is proposed for Sylacauga, as is an extension of the Mobile program.

Other actions to improve health care delivery include promotion of the Weed problem-oriented medical records system, which has been officially adopted by the University of Alabama School of Medicine and the University of Alabama Hospitals and Clinics. Universal use of this system will do much to effect the continuity and comprehensiveness of health care and the computerization of records.

A major step in improving health care delivery and expanding cooperation among hospitals has been the appointment of an associate hospital director for Regional Medical Programs at the Birmingham Veterans Administration Hospital and of health program liaison specialists as local counterparts at the Veterans Administration hospitals in Tuscaloosa, Tuskegee and Montgomery. This regionalization program, initiated by the Veterans Administration, is vitally important to the Program and for the first time will weld together the total health care delivery system in Alabama.

Problems in delivering rural health care are being approached through summer student programs, support of the physician assistant program, cooperation with the Appalachian Tri-County Health Planning Commission, and cooperation in a Model Cities project to improve the nutrition of residents in Tuskegee and the surrounding area. The Program works closely with the Council for Community Health Services of the University of Alabama in Birmingham. In addition, Program staff members serve on the Committee on Health Services for the Poor, which has a planning grant to develop a health care delivery system in a substandard area of Birmingham.

The Medical Association of the State of Alabama and the Medical Center of the University of Alabama in Birmingham have sought assistance from the Program in drafting a statewide plan to improve distribution and delivery of health care. This challenge represents a unique opportunity to fulfill the Program's goal and explore methods of evaluating the quality of medical care.

Summary

In its four years of existence, the Alabama Regional Medical Program has involved the state's health care professionals and the general public in discussing solutions for the many problems involved in providing the best available medical care for all persons in Alabama. The Program's main activities have been to coordinate and expand continuing education for physicians, nurses, and allied health professionals; to expand present training programs and form new ones; and to cooperate in long-range planning to improve delivery of health care, especially to the rural population and the urban poor.

Office address: 1917 Fifth Avenue South, Birmingham 35233.

Reference

1. Kissick, W. L.: Health policy directions for the 1970's. New Eng J Med 282:1343-1354, 1970.

The $371.4 billion the Federal Government owed at the start of 1970 exceeded by more than $67 billion the public debt of all other nations combined.

—Illinois Medical Journal.

MIST: A Two-Year Report

Margaret S. Klapper, M.D.,* John M. Packard, M. D.,**
Thomas W. Sheehy, M. D.***

MIST, Alabama's Medical Information Service via Telephone, has now been operative two years. Provided by the University of Alabama School of Medicine through its Division of Continuing Medical Education, it is well known to most of the physicians of the state, to whom it provides prompt, person-to-person consultative service with appropriate individuals at the Medical Center.

Enthusiastic response of both practicing physicians and faculty to this mechanism for the exchange of medical information has prompted expansion of the potential of the telephone in Alabama as an aid to medical education and as a consultative device. Electrocardiographic transmission capability from 11 Alabama hospitals now adds another dimension to the cardiac consultation service in these communities. Dial Access libraries for physicians and nurses have been added, and pilot projects in telelectures and teleconferences are under way. These latter programs are subprojects of MIST, one for the Veterans Administration hospitals in Alabama (MIST-VAH)† and the other for a tri-county area (MIST-Tri).†† Plans for the future include programs by telephone in reinforcement of speech therapy and in computer assisted diagnosis.

There is much interest on a national level in the MIST program. It has been described or presented at national meetings and presented by invitation to two state medical societies. The office has received more than 30 inquiries and requests for descriptive material from 17 states and three foreign countries. To us, one of the chief reasons for the success of MIST is that it is a two-way avenue of exchange, with both caller and responder serving as a resource of medical information. By removing the barrier of geographic distance between colleagues, it brings physicians over the whole state into the mainstream of medicine.

MIST could not have been possible without three elements of medicine coming together: (1) faculty and administrative and financial support from the School of Medicine; (2) financial and staff support through the Alabama Regional Medical Program; and (3) the physicians themselves in Alabama.

The following figures and tables summarize some of the data from the two-year period and should be of interest to the physicians of Alabama.

Table I

Calls to Medical Center Cardiology--By Department

Medicine	724
Pediatrics	138
Surgery	63
Total	925

(Continued on next page)

*Professor of Medicine and Director, Division of Continuing Medical Education, University of Alabama School of Medicine.

**Professor of Medicine, University of Alabama School of Medicine, and Director, Alabama Regional Medical Program.

***Professor of Medicine, University of Alabama School of Medicine and Chief of Medical Services, Birmingham Veterans Administration Hospital.

†Supported in part by a grant from the Veterans Administration.

††Supported in part by an Appalachian Health Grant.

Table II

Calls to Medical Center Oncology--By Department

Gynecology	120
Medicine	647
Pediatrics	97
Radiology	119
Surgery	30
Total	1,013

Table III

Calls to Pediatrics--By Age of Patient

Neonates	163
1 Month to 1 Year	101
1 to 6 Years	120
6 to 12 Years	110
12 to 18 Years	138
Total Patients Discussed	632
Total Calls Received	990

Table IV

One-Month Sample of Questions (June 1971)

Treatment and Management	110
Diagnostic Inquiry	50
Requests for Referral	90
Other (prognosis, services, etc.)	57
Total	307

Table V

Physician Users by Community Population

Community Population	Total Physicians	MIST Users	% MIST Users	MIST Calls	% MIST Calls	Calls Per MIST User
< 20,000	688	317	46%	2,694	44%	8.5
> 20,000	1,863*	447	29%	3,360	56%	7.3

*Exclusive of fulltime faculty and other fulltime employed physicians.

Table VI

Age of Physician MIST User

Age	Total Users
29 to 39	186
40 to 50	295
51 to 61	153
62 to 71	56
72 to 86	9
Unknown	66

(Continued on Page 452)



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ntraindicotions: DRIXORAL should not be given to children under 12 yeors age. DRIXORAL should not be administered to pregnant women or nursing others until the safety of this preparation for use during gestation and lacta-n is established. The preparation is contraindicated also in patients with vere hypertension and coronary ortery disease. **Warnings:** As in the case of her preparations containing central nervous system acting drugs, patients ceiving DRIXORAL should be cautioned about possible additive effects with cohol and other central nervous system depressants (hypnotics, sedatives, nquilizers). For the same reason they should be cautioned against hazardous cupations requiring complete mental alertness such as operating machinery or driving a motor vehicle. **Precoutions:** Isoephedrine-containing preporotions should be used with caution in the presence of: hypertension; coronary artery disease; any other cardiovascular disease; glaucomo; prostatic hypertrophy; hyperthyroidism; diabetes. **Adverse Reoctions:** The physician should be alert to the possibility of all possible adverse reactions which have been observed with sympathomimetic and antihistaminic drugs. These include: drowsiness; confusion; restlessness; nausea; vomiting; drug rash; vertigo; palpitation; anorexia; dizziness; dysuria due to vesicle sphincter spasm; headache; insomnia; anxiety; tension; weakness; tachycardia; angina; sweating; blood pressure elevation; mydriasis; gastric distress; abdominal cramps; central nervous system stimulation; circulatory collapse. **For more complete details, consult package insert or Schering literoture ovailable from your Schering Representative or Medicol Services Department, Schering Corporation, Union, New Jersey 07083.**

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and the Latin **sedatus,**
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Please observe the following conservation guidelines:
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*** Avoid leaning on materials or piling them up, especially in an open position**
*** Food and drink (including water) are not allowed near the books**
*** Use archival foam supports whenever possible**
*** Notify library staff if you see any evidence of insects or rodents, mildew, damp, or unusual dirt or deterioration**
*** Do not attempt to repair material yourself. You should flag the text and communicate problems of any kind to your direct supervisor or cataloger**
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*** Material should be used on a table or other flat, elevated surface; do not put on the floor or on your lap**

Instructions for handling printed material including books, broadsides, maps, pamphlets, and ephemera) Paper-based materials, including such historical documents as broadsides, maps, pamphlets and ephemera, record the life and collecting interests of previous owners. In addition, all the parts of a book--the binding, paper, and text--afford evidence of its past. Your cooperation and care in handling ensure the preservation of their physical as well as textual integrity. Please note that certain individual items or kinds of material may require advance notice and additional staff time in order to be prepared for safe use before it is scanned

*** IA staff will present books in foam, plexiglass, or cardboard cradles, with or without liners, designed to prevent stress to all parts of the book. Please keep books in the cradle, which should sit squarely on the table. Cradles are designed for use by one book at a time.**
*** Do not rest anything on top of books. Never put anything in a book; acid free markers will be provided when needed. Books should be closed if left for any period of time.**
*** Gloves may be provided with material that is especially sensitive to damage from direct handling such as photographs, negatives, and metal bindings.**
*** Please notify a member of the supervisory staff or coordinator, if you find damage to paper or bindings which prevents safe handling. All pieces of bindings or paper that break off should be kept with the original material and shown to a staff member.**
*** Illustrations, letters, and other sheets that fold out or are tipped into books may require special handling procedures or materials; please consult a staff member. This needs to be strictly adhered to as this material will make it's way to the foldout station to complete it's scanning. Materials housed in boxes or cartons should be kept in the order received; please remove one item at a time using place markers provided by a scanning center staff member.**
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*** Be aware of the condition of the books you are handling. Even new-looking books can be at risk, e.g., perfect-bound books with pages that are simply glued into the spine and that can easily pop out when roughly handled.**
*** To turn a page of a book, lift the top outer corner and lightly slip the fingertips down the fore-edge, supporting the page. Do not attempt to turn a page while holding something else.**

(Continued from Page 452)

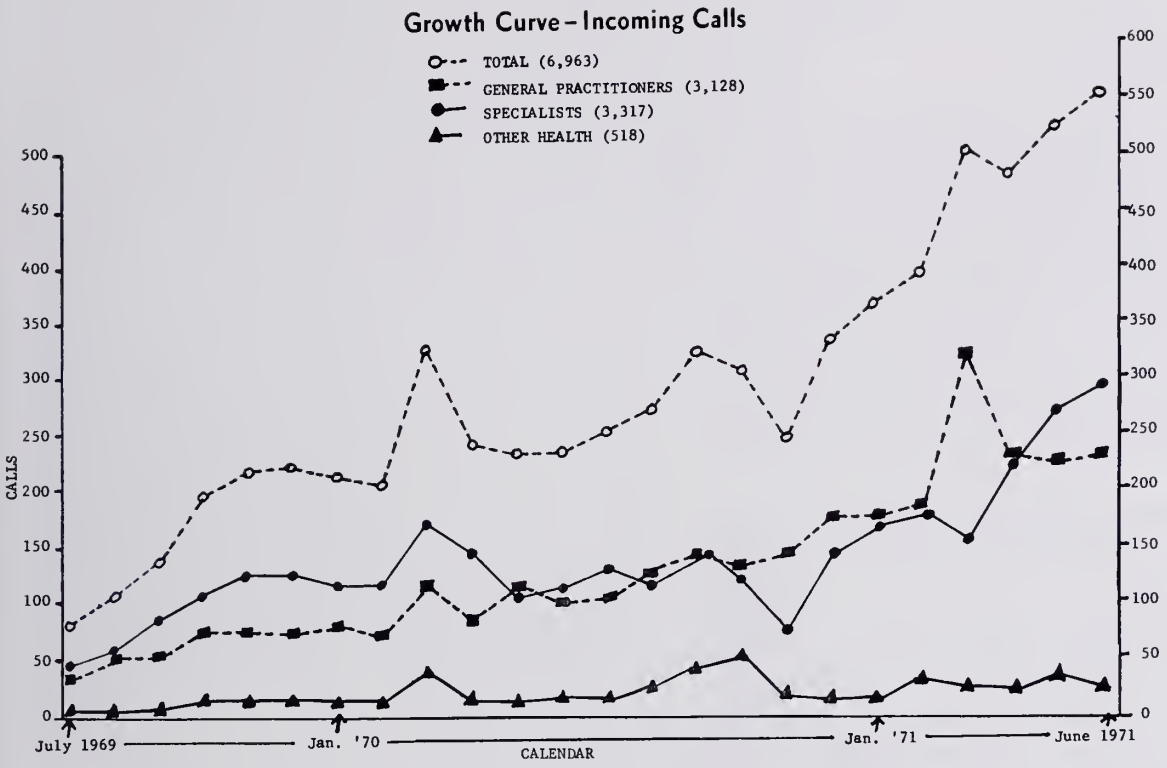


Figure 1. Growth curve--incoming calls.

(Continued on Page 454)

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(Continued from Page 448)

Table VII

Calls per Physician MIST User

No. Calls	No. Physicians
1-5	472
6-15	195
16-25	45
26-50	39
51-99	12
Over 100	1

6,054 Incoming Calls by 764 Practitioners

Table VIII

Calls Received per Faculty Responder

No. Calls	No. Faculty
1-20	186
21-40	29
41-60	14
61-80	13
81-100	9
Over 100	14

(Continued on Next Page)

New Mexico has ended lifetime licensure for physicians. Starting in 1974, physicians' licenses won't be renewed unless they have completed 120 hours of specified continuing education credits in each three-year period.

The Kaiser Foundation Medical Care program has announced a $130 million expansion that is to include construction of three new centers and additions to ten others in California and Ohio. The program was not specific about all of the areas in which it plans to expand but its move is eastward.

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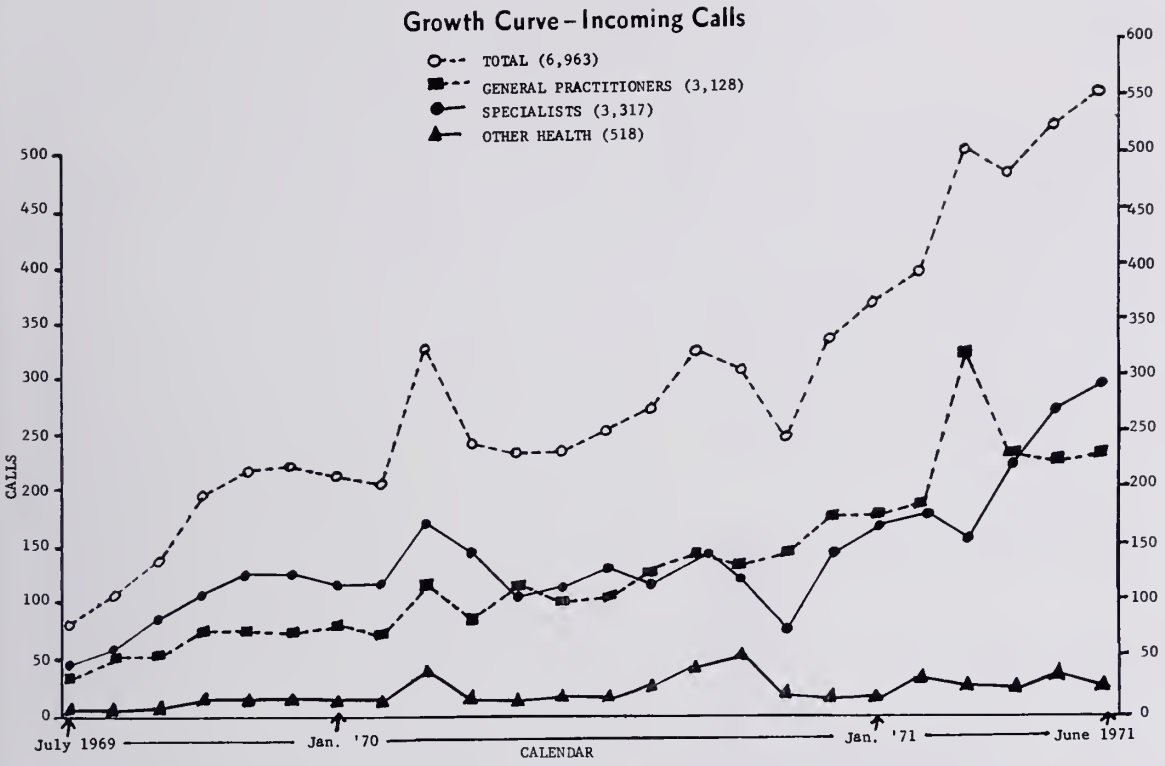


Figure 1. Growth curve--incoming calls.

(Continued on Page 454)

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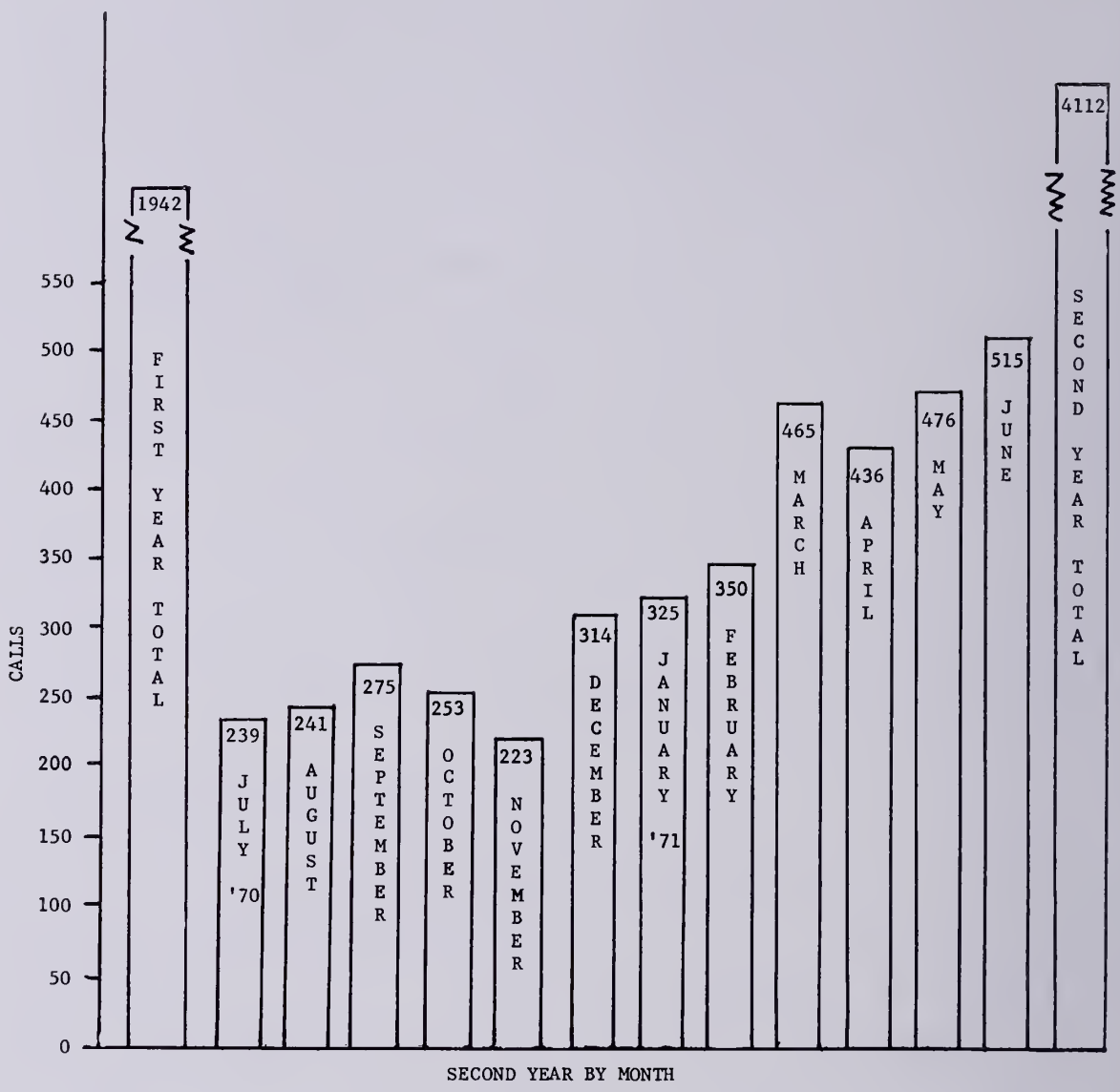


Figure 2. 6,054 calls by 764 practicing physicians.

(Continued on Page 455)

There was a recent joke in Europe to the effect that in January scientists in the United States announced a new fundamental invention; in February the Russians announced that they had invented it ten years before; and in March the Japanese commenced large scale commercial shipments of the device into the United States.

—Joseph S. Wright,
Board Chairman,
Zenith Radio

College of Nutrition

The Twelfth Annual Meeting of the American College of Nutrition will be held in New Orleans, Louisiana, on Sunday, Nov. 28, 1971, in the Grand Ballroom of the Royal Sonesta Hotel. The one-day program includes a symposium on hyperlipidemias and atherosclerosis and a discussion of nutrition in outer space. Hotel reservations should be made through the AMA Housing Bureau.

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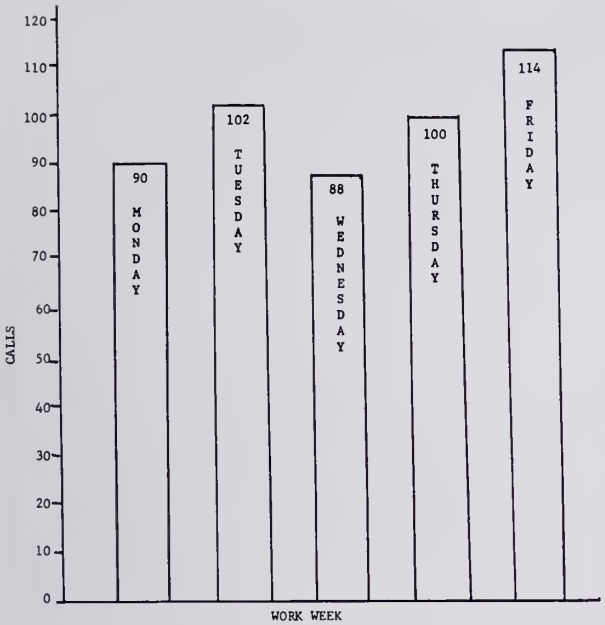


Figure 3. Incoming calls by day during work week (one-month sample--June 1971--494 calls).

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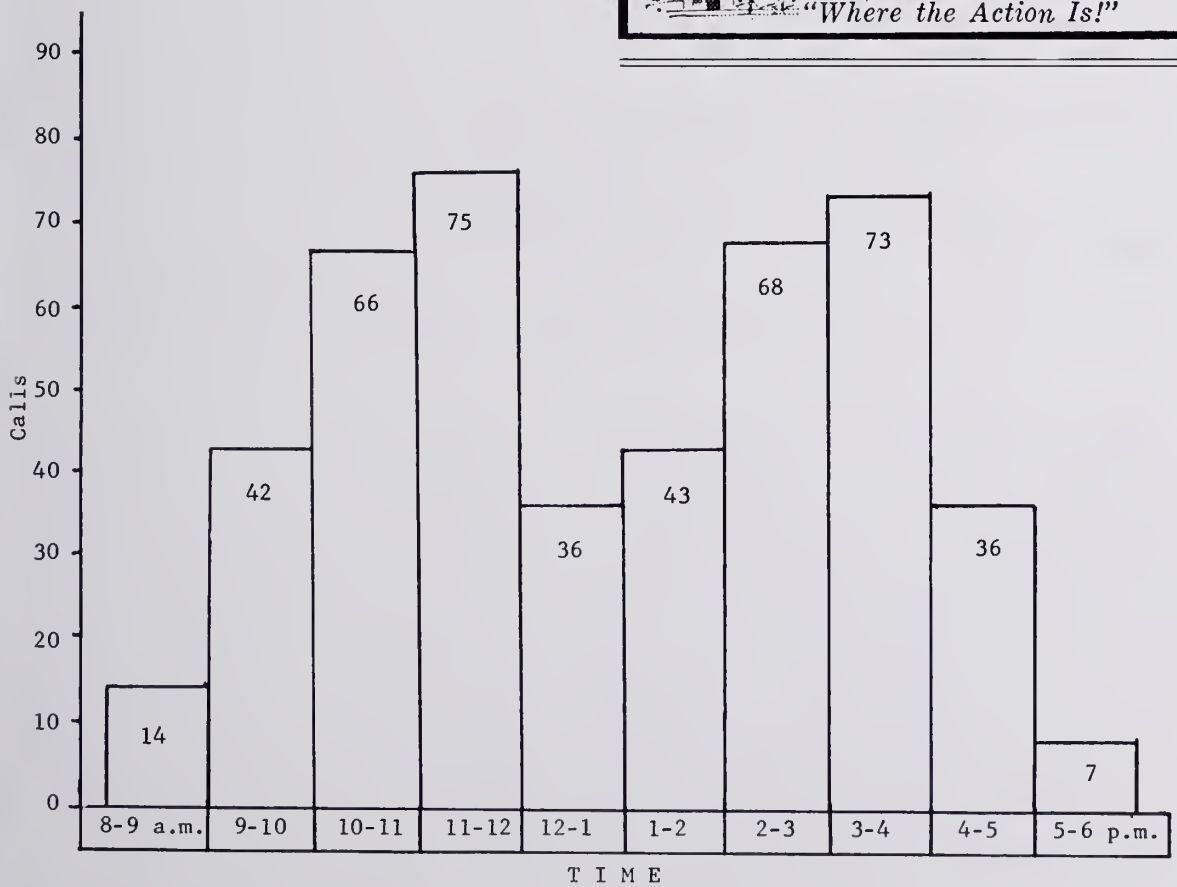


Figure 4. Incoming calls by hour during work week (one-month sample--July 1971--460 calls).

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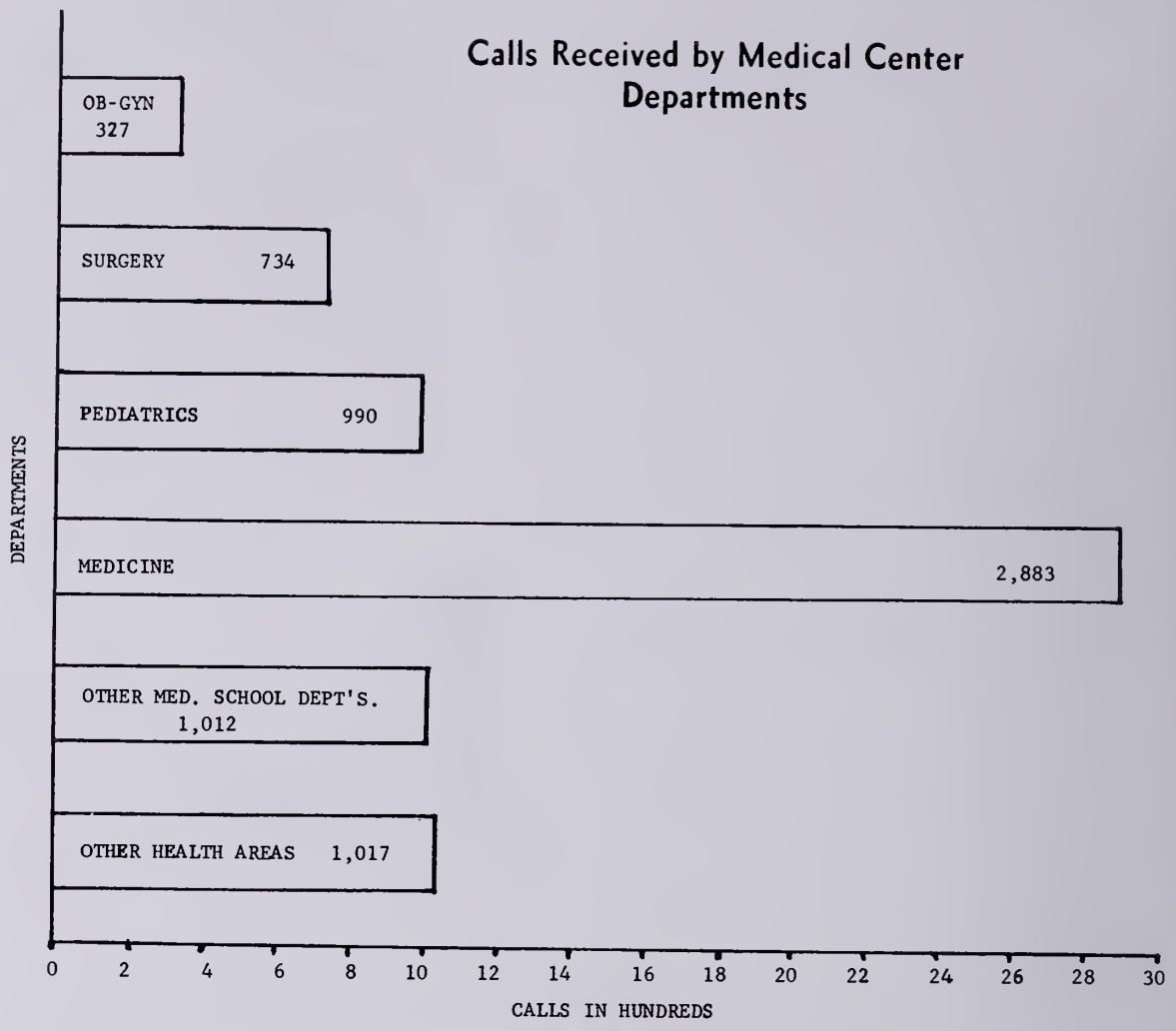


Figure 5. Calls received by Medical Center departments.

(Continued on Page 457)

The human story does not always unfold like an arithmetic calculation on the principle that two and two make four. Sometimes in life they make five or minus three; and sometimes the blackboard topples down in the middle of the sum and leaves the class in disorder and the pedagogue with a black eye. The element of the unexpected and the unforeseeable is what gives some of its relish to life and saves us from falling into the mechanical thralldom of the logicians.

—Winston Churchill.

Write it on your heart that every day is the best day in the year. He is rich who owns the day, and no one owns the day who allows it to be invaded with fret and anxiety. Finish every day and be done with it. You have done what you could. Some blunders and absurdities, no doubt, crept in. Forget them as soon as you can, tomorrow is a new day; begin it well and serenely, with too high a spirit to be cumbered with your old nonsense. This new day is too dear with its hopes and invitations, to waste a moment on the yesterdays.

—Ralph Waldo Emerson

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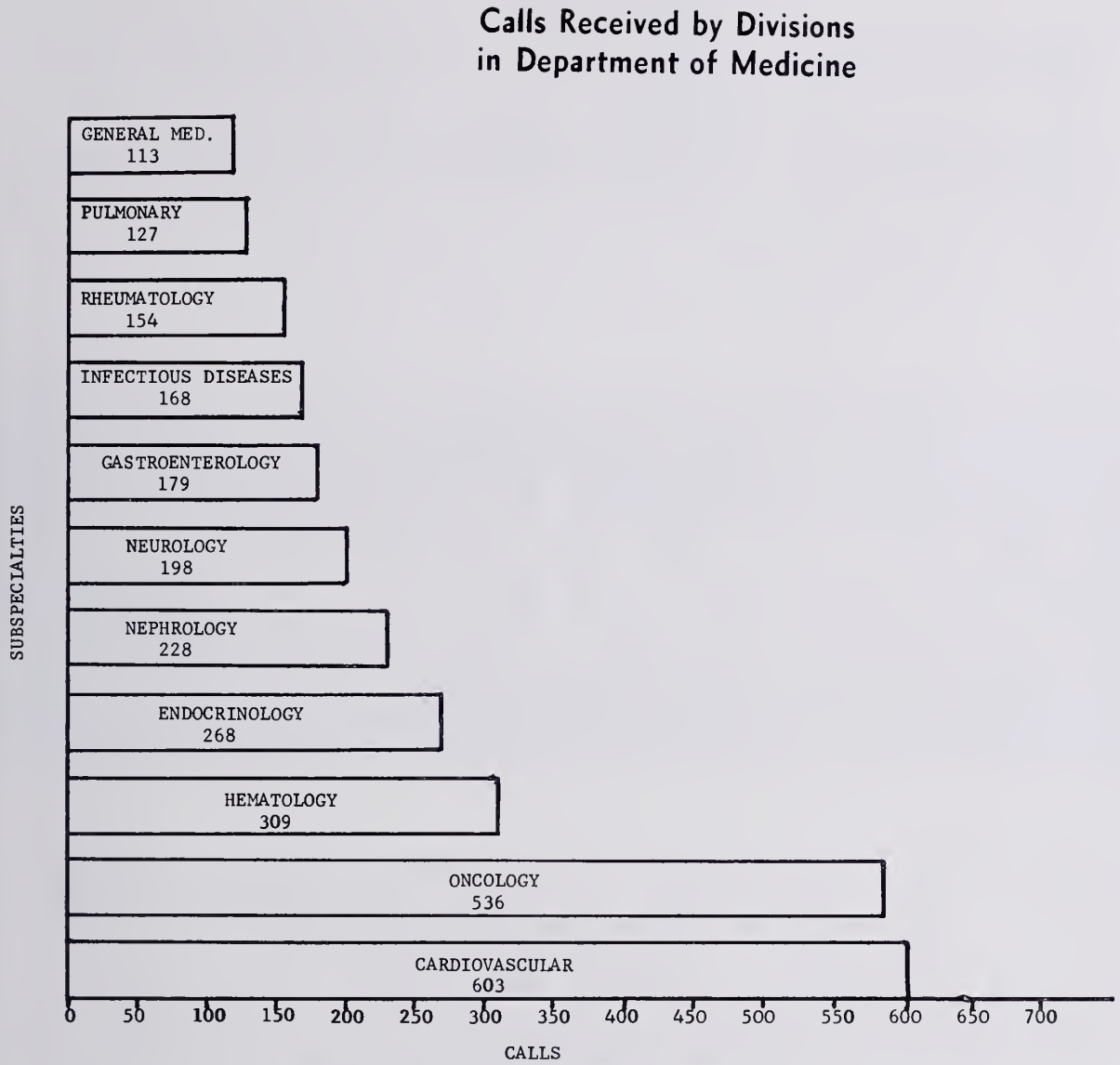


Figure 6. Calls received by divisions in Department of Medicine.

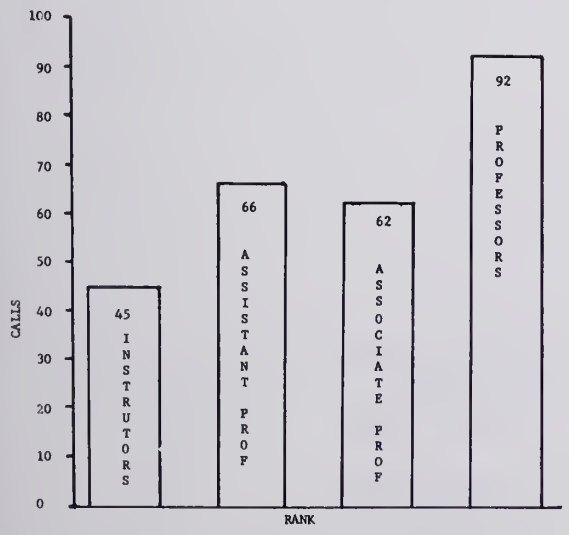


Figure 7. Calls received by 265 Medical Center faculty.

There are men so conservative they believe nothing should be done for the first time, says Minnesota Medicine. . . And, one might add, some so liberal they believe anything done more than twice is ready for change.

Some women blush when they are kissed. Some call for the police. Some bite. But the worst are those who laugh.

—Minnesota Medicine,
accredited to Anonymous

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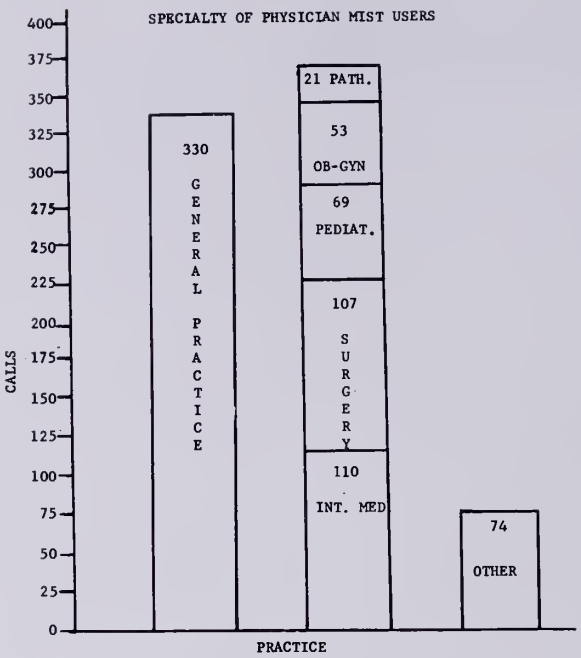


Figure 8. Specialty of physician MIST users.

Brunch Is A Very Good Thing

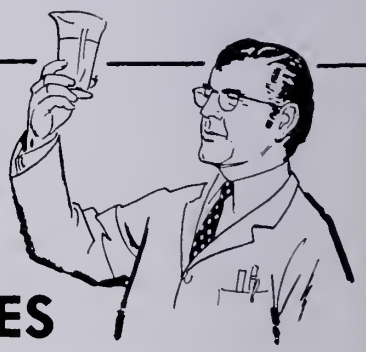
On first blush, June Roth's let's-Have-a-Brunch Cookbook would seem to have little appeal to doctors. Published by Essandess division of Simon & Schuster, it is priced at $5.95. A quick glance through it will correct the mistaken idea that it lacks appeal to doctors and their wives.

There are three divisions of the book: Holiday Brunches (nine of them from New Year's to Christmas), Special Occasion Brunches (15 of them, from Birthday, Housewarming and Bon Voyage to Before-the-Game, Graduation, Barbecue and Apres Ski), and Around the World (from Canadian to Viennese with Chinese, Israeli, Mexican, Spanish and six others in between).

The recipes are all there, including before-brunch drinks from the Bloody Mary to Cranberry Cheer, the Pink Lady to Apricot Nectar.

—M.

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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

Nothing new about Synirin other than ...it's a stable, uncoated, fast disintegrating tablet of aspirin with pentobarbital potentiating the aspirin analgesia.

Synirin®

ASPIRIN 5 GR.—PENTOBARBITAL 1/8 GR.

ETHICAL ANALGESIA (economical if prescribed in 100 units with privilege of refills)

PRESCRIBING INFORMATION: To relieve tension headaches and arthritic pains, 2 tablets q 4 h. Aspirin and pentobarbital begin their action promptly, continuing for about 4 hours. The small pentobarbital content gives no perceptible sedation. Pentobarbital is destroyed by the body and there is no accumulation. Synirin will supply any aspirin therapy with equal safety. Use aspirin with caution in peptic ulcer.

EACH UNCOATED TABLET CONTAINS:

Aspirin .....325 mg. (5 gr.)
Pentobarbital* .....8 mg. (1/8 gr.)
*May be habit forming.

Federal law prohibits dispensing without prescription

DISPENSED IN BOTTLES OF 100 AND 1000 TABLETS

WILLIAM P. POYTHRESS & COMPANY, INC.
RICHMOND, VIRGINIA 23261
Manufacturers of Ethical Pharmaceuticals Since 1856

A clinical supply of this new aspirin formulation may be requested.



Vital Statistics

NEW MEMBERS

Morgan County

Crouch, Wilbourne Ray, b 45, mc U. Miss. 69, recip. Miss. 70, Doctor's Clinic, P. O. Box 930, Hartselle, Alabama 35640. GP.

Hawkins, Rowland Speck, b 41, mc U. Tenn. 67, recip. Tenn. 71, Pineview Hospital, Box 31, Hartselle, Alabama 35640. Oph.

MEMBERS DECEASED

Houston County

McFatter, Theron K., Dothan, Alabama, Deceased 10/4/71.

Jefferson County

Riser, Abner Bankston, Birmingham, Alabama, Deceased 9/28/71.

Mobile County

England, Francis Tillman, Mobile, Alabama, Deceased.

Lester, Richard Paul, Mobile, Alabama, Deceased.

Ross, Cecil Hubert, Mobile, Alabama, Deceased.

Sellers, David Frederick, Daphne, Alabama. Deceased 9/71.

CHANGES OF ADDRESS

Clarke County

Bowling, Robert S., Jr., present Jackson to P. O. Box 65, Jackson, Alabama 36545.

Henry, Margaret L., present Thomasville to 218 Wilson Avenue, P. O. Box 848, Thomasville, Alabama 36784.

Larrimore, Lennox W., present Thomasville to 109-A Wilson Avenue, S. W., Thomasville, Alabama 36784.

Larrimore, Roy W., present Thomasville to 109-A Wilson Avenue, S. W., Thomasville, Alabama 36784.

May, Charles E., present Jackson to 910 College Avenue, P. O. Box 655, Jackson, Alabama 36545.

Jefferson County

Crow, Charles B., Jr., present Birmingham to 1211-27th Place, South, Birmingham, Alabama 35205.

Crow, John B., present Birmingham to 1211-27th Place, South, Birmingham, Alabama 35205.

Denton, James C., present Birmingham to 801 Princeton Avenue, Birmingham, Alabama 35211.

Gilmore, Keith W., present Birmingham to P. O. Box 4276, Birmingham, Alabama 35206.

Ramsey, Joseph H., present Birmingham to 1720 South 7th Avenue, Birmingham, Alabama 35233.

Smelo, Leon S., present Birmingham to 1211-27th Place, South, Birmingham, Alabama 35205.

Lauderdale County

Deibert, Kirk R., present Florence to Route 11, Box 72, Florence, Alabama 35630.

Mobile County

Boger, Robert M., present Mobile to 1575 Springhill Avenue, Apt. 219, Mobile, Alabama 36604.

Cowden, Robert W., present Mobile to 1153 Springhill Avenue, Mobile, Alabama 36604.

Daniels, Charles W., present Mobile to 118 North Lafayette, Mobile, Alabama 36604.

Montgomery County

Alphin, Thomas H., present Montgomery to 1919 7th Avenue South, P. O. Box 109, Birmingham, Alabama 35233.

Tuscaloosa County

Donald, Robert H., present Tuscaloosa to 225 University Boulevard East, Suite 203, Tuscaloosa, Alabama 35401.

Fernandez, Gabriel, present Tuscaloosa to 225 University Boulevard East, Suite 107, Tuscaloosa, Alabama 35401.

Richardson, Luther W., Jr., present Tuscaloosa to 225 University Boulevard East, Suite 204, Tuscaloosa, Alabama 35401.

NEW TELEPHONE NUMBERS

Abernathy, Frank, Jr., Shelby	663-2691
Alphin, Thomas H., Montgomery	871-3805
Boger, Robert M., Mobile	438-9965
Crouch, Wilbourne R., Morgan	773-2521
Donald, Robert H., Tuscaloosa	758-7544
Hawkins, Rowland S., Morgan	773-2501
Ramsey, Joseph H., Jefferson	934-5445
Rudder, William H., Clarke	252-5820

CHANGE OF OFFICERS

Colbert County

Secretary-Treasurer — Thomas L. Pritchett Jr., 1111 South Raleigh Avenue, Sheffield, Alabama 35660.

Shelby County

Secretary-Treasurer—Frank Abernathy, Jr., P. O. Box 8098, Siluria, Alabama 35144.

MEMBER TRANSFERRED

Shelby County

Abernathy, Frank, Jr., P. O. Box 8098, Siluria, Alabama 35144, from member Jefferson County Medical Society to member Shelby County Medical Society. GP

Chiropractic was invented in 1895 by Daniel David Palmer, an Iowan who earlier billed himself as a "magnetic healer." Palmer began by claiming that he had restored hearing in a man who had been deaf for 17 years by pushing back into place a misaligned vertebra.

—New York Times

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ANTACID

Your ulcer patients and others will respond favorably to it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

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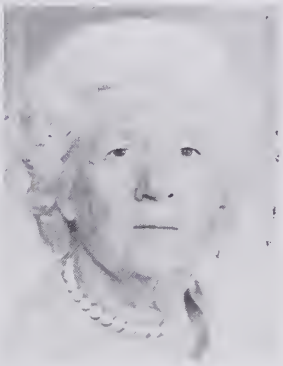
New Physicians Licensed to Practice in Alabama



Judson Gregory Black, M. D.
Birmingham



Stuart Preston Childress, Jr., M. D.
Opelika



Virginia Fant Downes, M. D.
Birmingham



Thomas Clyde Duncan, M. D.
Huntsville



Ellis Franklin Friedman, M. D.
Montgomery



John Phillip Harris, M. D.
Mobile



Donald F. Hodurski, M. D.
Montgomery



Jerry Eugene Jackson, M. D.
Ft. Rucker



Robert Allen Jacob, M. D.
Birmingham



John David Lee, M. D.
Mobile



Lawrence Edward Lifson, M. D.
Ft. Benning



Eugene Mitchell Long, Jr., M. D.
Opelika

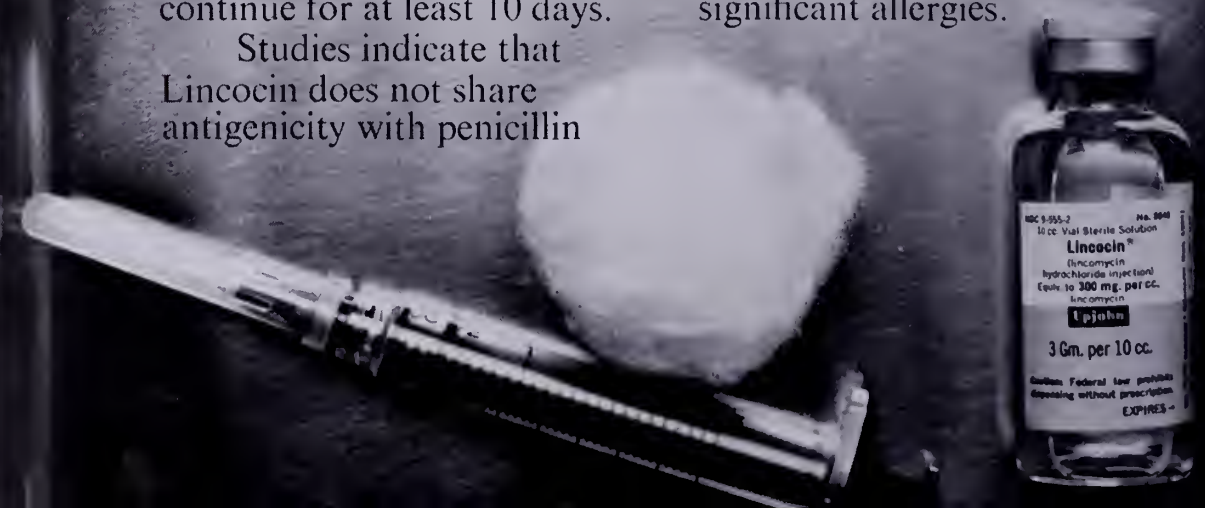
(Continued on Page 467)

Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With β-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.



So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

Sterile Solution (300 mg. per ml.)

Lincocin®
(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



© 1971 The Upjohn Company

Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances.



Cardiovascular—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

Syrup, 250 mg. per 5 ml.—60 ml. and pin bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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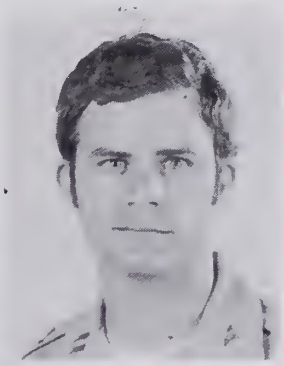
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Kalamazoo
Michigan 49001

Upjohn

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Barry Michael Maletzky, M. D.
Ft. Rucker



William Averett Marshall, M. D.
Ft. Benning



Ralph Burton Pfeiffer, Jr., M. D.
Birmingham



Joseph Gerald Reves, M. D.
Birmingham



Thomas Newton Robinson, M. D.
Montgomery



James Adolph Sawyer III, M. D.
Birmingham



Everette Arden Weathers, M. D.
Huntsville



Linder Earl Wingo, M. D.
Pensacola

Drug That Can Dissolve Some Kidney Stones Holds Promise

In the course of studies of causes and possible therapy of kidney stones, investigators at North Carolina Baptist Hospitals (Bowman Gray School of Medicine) in Winston-Salem have developed a promising treatment for this widespread disorder.

For some time, they have been evaluating the therapeutic use of polycyclic dyes, specifically methylene blue, in certain forms of urinary calculi. Sufficient evidence has now been accumulated by them and others to indicate that methylene blue can act as a kidney stone dissolver in patients that form the calcium oxylate type of stone. They report that electron microscope studies of its action provide clear evidence of the "etching away" of calcium oxylate crystals.

They emphasize, however, that this drug is by no means a cure-all for all forms of kidney stones and that more work needs to be done on selection of patients for this therapy. They also suggest the possibility that more effective polycyclic dyes may be available or may be developed. (Principal Investigator: William H. Boyce, M. D.)

The John A. Hartford Foundation, Inc. Bulletin, Oct. 1971.

Birmingham Pediatrician Among 50 - Year Club Members

There's a pretty little spot down in Escambia County, near the head of Perdido Bay, identified in no other way in 1898, when Samuel Patrick Wainwright was born there on Friday, Sept. 23rd. Since that time it is village enough to acquire a name, though not a postoffice. It is known as Porch, Ala.

Young Wainwright attended the public schools of nearby Atmore, and then went on to the University of Alabama for his premed work, before entering Tulane from which he received his M. D. degree in 1922, which qualifies him for MASA's exclusive 50-Year Club when the annual meeting is held in Montgomery in April.

In between interning at Charity Hospital, New Orleans, and a residency in Bellevue, New York, Dr. Wainwright served for two years as assistant medical adviser at Cornell, in Ithaca, N. Y. He was for two years chief resident of Children's Hospital, Washington, D. C. An SATC veteran of World War I, he entered the Medical Corps in World War II, serving with the 68th General Hospital in England, and attaining the rank of lieutenant colonel.

Meantime he met and married a North Carolina girl, Virginia Huss of Gastonia. Their son, Samuel Huss Wainwright, is a civil engineer residing in Dothan. He and Mrs. Wainwright have three sons.

A pediatrician, Dr. Wainwright was forced into semi-retirement by an obstreperous heart several years ago. Until then the senior Wainwrights would not have hesitated to list their mutual hobby as traveling. But today the onetime specialist in babies' ailments, must follow his three less tiring hobbies:— music, reading, and photography; particularly photography. The photographic club to which he belongs counts at least two other Birmingham physicians in its membership—Drs. Frank Sims Moody and Joseph Moore Dixon.



S. P. WAINWRIGHT, M. D.

Dr. Wainwright is a member of the Pi Kappa Phi social fraternity, Theta Kappa Psi professional fraternity, a Mason, and elder emeritus of the South Highlands Presbyterian Church of the U. S.

Exploiting The Public?

There has been a great deal of news lately telling how the physicians in this country have been exploiting the public. Certainly their incomes have risen to new levels, but so have other wage earners'. The real facts show that the physician fee index has actually increased less than others.

The statistics showing increases in physicians' incomes are due more to an increase in their volume of work than the amount they charge per procedure.

—Research Bulletin,
Michigan State Medical Society

AMA Policy

The American Medical Association has recently published a compilation of policy positions relating to the practice of medicine. The Journal will publish these policies each month as space permits.

It is suggested that physicians clip and file them for future reference.

Abortion

The AMA holds that "abortion is a medical procedure and should be performed only by a duly licensed physician and surgeon in an accredited hospital acting only after consultation with two other physicians . . . and in conformance with standards of good medical practice and the Medical Practices Act of his state."

The House stresses that "Neither physician, hospital, nor hospital personnel shall be required to perform any act violative of good medical judgment or personally-held moral principles. In these circumstances good medical practice requires only that the physician or other professional personnel withdraw from the case so long as the withdrawal is consistent with good medical practice."
(adopted June, 1970; reaffirmed Dec. 1970)

The patient and her family should be advised of medical implications and possible untoward emotional and physical sequelae. (June 1967)

Abortion Referral Solicitation

The AMA believes patient solicitation is unethical whether it be for abortion or for any other medical service.

The House urges local medical societies to take proper disciplinary action whenever physicians are involved in the solicitation of patients. (Dec. 1970)

Alcoholism

Alcoholism is a disease that merits the serious concern of all members of the health professions. The medical profession has the responsibility to see that, consistent with good medical practice, alcoholics are afforded the opportunity for hospital care when essential to treatment. (Nov. 1966)

Birth Control

Recognition of the problems that relate to human reproduction is a matter of responsible medical practice. The medical profession should accept a major responsibility in matters related to human reproduction as they affect the total population and the individual family. In discharging this responsibility physicians must be prepared to provide counsel and guidance when the needs of their patients require it or refer the pa-

(Continued on Page 470)

in the Heart of
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CLOSE TO UNIVERSITY MEDICAL CENTER

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Birmingham's Friendly
Motel
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tients to appropriate persons. The AMA takes the responsibility for disseminating information to physicians on all phases of human reproduction, including sexual behavior, by whatever means are appropriate. (Dec. 1964)

All physicians should be permitted legally to give contraceptive information to their patients. (Dec. 1965)

Birth Control—Oral Contraceptives

The "Pill" is the most effective of all contraceptives when taken as directed. As with other medicine, side effects are possible. The most serious side effect is abnormal blood clotting. Serious problems are relatively rare, and the majority of women who would like to use the pill can do so safely and effectively. Periodic examinations by a physician are essential to provide the early detection which may prevent serious complications. Unusual swelling, skin rash or yellowing of the skin or eyes should be reported to a physician. (Aug. 24, 1970)

Blood Banking

The medical profession has primary responsibility for the care and treatment of patients and therefore has a paramount interest in evaluating facilities and procedures for blood procurement, storage and use. Local medical societies can best discharge this responsibility. (Dec. 1963)

The replacement of blood in kind by the patient, his family, his friends and various organizations of which he might be a member is favored. The AMA opposes the payment for whole blood and red blood cells by prepaid health programs, with the exception of cross-matching, typing and administration of blood or blood byproducts, although exceptions may need to be made if an unusual number of transfusions are required and if volunteer donors are not available. (Jan. 1967)

Blood Liability

The AMA will join with the American Assn. of Blood Banks and the American Hospital Assn. in seeking remedial legislation to remove the threat of strict liability from blood transfusions. Unless the supplying of blood is declared a "service" and not a "sale," the threat of liability could result in increased cost of blood transfusions and adversely affect the availability of medical care. (Dec. 1970)

The Association has drawn up model state legislation which would protect processors, blood banks, hospitals, physicians and others who contribute to or participate in blood and tissue services, from liability unless negligence is proven. (Dec. 1970)

The procurement, processing, distribution or use of human blood and other human tissues is the rendering of medical services by all who participate therein; **not** the selling of a commodity. (Nov. 1967)

Prime Cookbook For Doctors

Doctors interested in food, either cooking it or as gourmets eating it with discrimination, are more numerous in Alabama than one would suspect—according to one of them.

On the strength of that assertion, mention is justified of "The French Chef Cookbook," just reissued in a paper binding under the imprint of Bantam, a 512-page volume plus 32 pages of photographs, priced at $1.95. The book carries the byline of Julia Child, who will need no introduction to nine out of ten food fanciers in the state.

In a hard cover, this book was published by Knopf and sold more than 200,000 copies, leading The Times best-seller list for 12 weeks. That is understandable. —M.

S. S. HOPE Returns Home November 22

The S. S. HOPE has returned to the United States after a ten-month mission in the West Indies. She leaves behind vast improvements in the system of health care delivery within the Caribbean Islands.

The 108-bed hospital ship arrived at Locust Point Marine Terminal, Pier 4, Baltimore, Maryland, at 10 a. m. Hundreds of well-wishers greeted the returning doctors, nurses and paramedical personnel who have served on the teaching/treatment mission.

During the next five years, HOPE will spend $5 million to implement a postgraduate medical education program at the University of the West Indies to encourage medical students to remain in the islands. Each year 40 per cent of the medical personnel training at the University migrate to other countries for graduate studies. This "brain drain" has created severe shortages of health manpower in the entire Caribbean area.

HOPE physicians in medical specialties of internal medicine, pediatrics, obstetrics and gynecology, radiology, pathology, and anesthesiology will serve long-term tours at the University with full faculty status. For the first time, postgraduate medical education will be possible in the islands for students from Jamaica, Barbados, Trinidad, and Guyana.

While in the West Indies, HOPE has provided a teaching hospital, additional skilled hands and has served as a training arena for physicians, student and allied health personnel.

More than 11,200 patients have been treated and 1,200 operations performed as a part of HOPE'S mission.

HOPE has been involved in a wide range of teaching activities within the nursing profession. Over 370 nurses participated as "counterparts" learning the latest techniques in nursing care. One of the specialized courses in newborn intensive care resulted in the first premature care unit in Jamaica. It is staffed and run by HOPE-trained local nurses.

Before HOPE'S arrival, there was a crucial shortage of anesthetists in Jamaica. Often a surgeon was expected to administer his own anesthesia as well as perform the operation. A three-year program for nurse anesthetists was begun so that within that time every hospital in Jamaica will have a fully-trained nurse anesthetist. The first group will graduate in December and will be assigned to parish hospitals. HOPE will provide instructors for the course following the departure of the ship.

After a period of repair and resupply, the ship will sail for the port city of Natal in northeastern Brazil in February. Following Brazil, her next mission will be to Venezuela in 1973. Since her maiden voyage in 1960, the S. S. HOPE has conducted medical teaching missions to Indonesia, South Vietnam, Guinea, Peru, Ecuador, Nicaragua, Colombia, Ceylon, Tunisia, and the West Indies. Land-based teaching programs continue in four of these countries.

In 1969, Project HOPE started domestic health programs at home in the Mexican-American community of Laredo, Texas, and on the 16-million acre Navajo Indian reservation at Ganado, Arizona. Here HOPE-supported teaching programs are helping local people find their own solutions to health problems.

Founded in 1958 by Dr. William B. Walsh, Project HOPE is the principal activity of The People-to-People Health Foundation, Inc., of Washington, D. C., an independent, nonprofit corporation supported by the American people.

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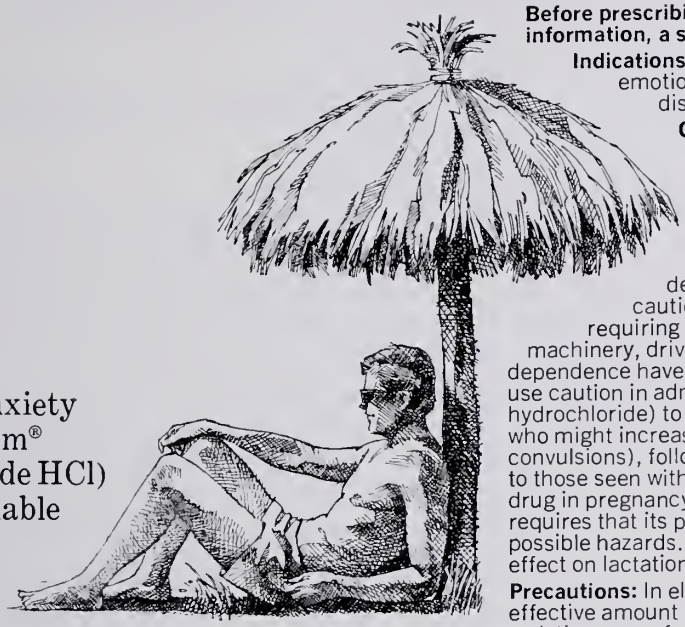
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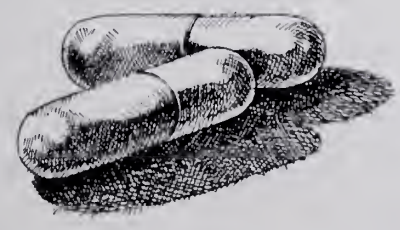
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ction of Librium®
:hlordiazepoxide HCl)
/ith the dependable
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ntispasmodic
ction of
uarzan® (clidinium Br).

Protects man from his own hungry personality. The action of Librium reduces nxiety—helps protect the vulnerable patient rom the psychological overreaction to stress hat clutches his stomach. At the same time, he action of Quarzan helps quiet the hyperctive gut, decreasing hypermotility and ypersecretion.

An inner healing environment with 1 r 2 capsules, 3 or 4 times daily. Of course, here's more to the treatment of duodenal lcer than a prescription for Librax. The paient—with your guidance—will have to adust to a different pattern of living if treatıent is to succeed. During this adjustment eriod, 1 or 2 capsules of Librax 3 or 4 times aily can help establish a desirable environıent for healing.

Librax: It can't change man's nature. ut it can usually make it easier for men to ope with the discomfort of stress—both sychic and gastric—that can precipitate nd exacerbate duodenal ulcer.

ibrax: Rx #60 1 cap. *a.c.* and 2 *h.s.*



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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Medical Association of the State of Alabama

Volume 41 • January, 1972 • No. 7

Office of Publication
19 So. Jackson St. — Montgomery, Ala. 36104
Subscription Price — $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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Warnings: Use during pregnancy is to be avoided.

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2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.

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President's Page

Physician's Assistants— Boon or Bomb?



DR. PHILLIPI

It was my privilege to attend the recent clinical session of the AMA in New Orleans to listen to the discussions of the various committees and to the proceedings of the House of Delegates. Considerable time was allotted to the now well-known physician's assistants program.

The reports concerning the physician's assistants were prepared jointly by the Council on Health Manpower and the Council on Medical Education with assistance from the Council on Medical Service. These reports were presented to the House of Delegates at this time for information only, with final action to be taken at the 1972 AMA annual convention.

As of now, there are some 150 centers who are training these para-medical personnel. Some 200 physician's assistants have gone through their formal training with their training period varying from 12 months to five years. Approximately 500 more will finish their training in June of 1972. Thirty states, including Alabama, have either given them legal status or are in the process of doing so. Physicians from a few states say they will fight giving the physician's assistants legal status. They believe that unless he gets legislative legal status, that he will die on the vine.

The AMA states that it has no choice but to become an active participant in the shaping of events which will eventually determine the place this new occupation will occupy in the health team. The AMA admits however, that at the moment, physician's assistants are the subject of attention and discussion totally disproportionate to their relative impact upon the provider of health services.

Perhaps I am like the farmer's mule who first has to be hit on the head with a 2x4, my attention gained, and then told about the virtues of the physician's assistant. But nothing I heard or saw in New Orleans convinces me otherwise. I simply am at a loss to understand how organized medicine has been persuaded by the health planners to help in the development of these para-medical personnel.

The AMA proposes plans and has drafted a program, "Essentials of an Approved Educational Program for the Physician's Assistant." This is to be used by proper agencies for accreditation. This proposal states that the high degree of responsibility an assistant to the primary care physician may assume required that, at the conclusion of his formal

---

Editor's Note: This month's President's Page is written by F. M. Phillippi, Jr., M. D., President-Elect of the Medical Association of the State of Alabama.

education, he possess the knowledge, skills, and abilities necessary to provide those services appropriate to the primary care setting. These services would include, but is not necessarily limited to, the following:

1) The initial approach to a patient of any age group in any setting to elicit a detailed and accurate history, perform an appropriate physical examination, and record and present pertinent data in a manner meaningful to the physician;

2) Performance and/or assistance in the performance of routine laboratory and related studies as appropriate for a specific practice setting, such as the drawing of blood samples, performance of urinalyses, and the taking of electrocardiographic tracings;

3) Performance of such routine therapeutic procedures as injections, immunizations, and the suturing and care of wounds;

4) Instruction and counseling of patients regarding physical and mental health on matters such as diets, disease, therapy, and normal growth and development.

5) Assisting the physician in the hospital setting by making patient rounds, recording patient progress notes, accurately and appropriately transcribing and/or executing standing orders and other specific orders at the direction of the supervising physician, and compiling and recording detailed narrative case summaries;

6) Providing assistance in the delivery of services to patients requiring continuing care (home, nursing home, extended care facilities, etc.) including the review and monitoring of treatment and therapy plans;

7) Independent performance of evaluative and treatment procedures essential to

(Continued on Page 485)



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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

What is Important?

As we leave 1971 to the historians, we look to 1972. It's not guesswork to look to the election of a President of the U. S. A., one senator from Alabama, all Alabama Congressmen, plus many state and local officials. Nor need we guess that these elected officials will write the laws all of us will have to live with. It's a certainty, too, that this is the year of National Health Insurance. How much "Nationalization" and how much "Health" will be decided by this year's end.

It's time we stop saying we don't have time for politics. If there's no time for politics—where will all the time come from to fill out all the forms many of the proposed Health Insurance will require? Each of us *makes* time for things we *want* to do be it reading a book, having an affair or being campaigners. We find time for things we consider *important.* The best health care is important. We cannot allow others to make all of the decisions.

Today is the day to become active in politics. Begin by becoming a member of ALAPAC ($25 per year for MD, plus $10 per year for wife) and AMPAC ($10 per year for MD, plus $10 per year for wife). Mail your check (one check will do the complete job) to ALAPAC 19 South Jackson Street, Montgomery 36104. Let your contribution speak for you. These combined dues are used to support candidates favorable to medicine's views.

Select a candidate of your own, be he Democrat, Republican or Independent. Contact him and offer any service you can. Wives are great at envelope stuffing, telephoning, post-card writing, etc. Too, wives like a piece of the action. You can be sure that when your candidate is elected, he'll have time to listen to your views. Medicine can use many listening ears.



Mrs. Gilder L. Wideman

The influence of the local doctor is powerful indeed. Use your influence for something important like electing candidates interested in better health (not bigger government and more controls) for all of us. You can be sure that if you don't think this job important enough to do many others will. You may not like their selections!

Frances Wideman
President



As Medical Costs Continue Spiraling Upward

Steadily spiraling costs of health care and the drip-drip-drip of acid criticism on the marble facade of medicine continue to damage the profession's image as the first month of the new year arrives.

And the months of 1972 stretching ahead offer little cause for optimism.

More than a hundred years ago a Kentucky poet, Henry T. Stanton, wrote a rhyming tragedy titled, "The Moneyless Man," which still appears in such collections as Doubleday's "Best Loved Poems of the American People."

Telling the story of the woman who died of neglect in her unheated hovel, while her jobless husband sought help frantically and futilely at the bank, in church and on the street, it is significant that in the distribution of responsibility, not one word of reproach was leveled at the medical profession!

In the first place, one gathers from the poem that the victim's troubles stemmed entirely from starvation and exposure. The cost of health care had nothing to do with it, and if there was a drip-drip-drip of bitterness, no part of it splashed on the doctor's door.

As 1972 dawns, there are challenges to the medical profession from every side . . . including the inside!

The individual doctor pursues his practice as best he can, according to his own capabilities, in the hospital, in the home and in his office; forever conscious of the fact that his mistakes will be magnified, his successes minimized, and his charges criticized.

If he errs in a diagnosis, he may be asked why a specialist was not called in. If a specialist is called in, he doubtless will be asked if this expense was necessary. (Would a candid answer here, that the call was simple insurance, be anything but ammunition for medicine's critics?)

These are but a sampling of challenges confronting medicine in 1972.

It seems very certain that there are three ways for the road ahead. If the road turns right, if the free-enterprise system survives, the free practice of medicine may hope to survive also. If the road turns left, ours will be a socialized state, with consequent and inevitable socialized medicine. If the road turns neither way, holding a middle course, then medicine will continue fair game for the politician in pursuit of a "cause."

"The Moneyless Man" of today would know where to turn. If not, be very sure that someone would guide him.



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Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

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For further prescribing information, please see following page.



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Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
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500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
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*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatmer *Skin and mucous membranes*—Skin rash urticaria, vaginitis, and rare instances of e foliative and vesiculobullous dermatitis ha been reported. *Liver*—Although no direct r lationship to liver dysfunction is establishe jaundice and abnormal liver function te (particularly serum transaminase) have be observed in a few instances. *Cardiovascu*—Instances of hypotension following pare teral administration have been report particularly after too rapid IV administ tion. Rare instances of cardiopulmonary rest have been reported after too rapid administration. If 4.0 grams or more adm istered IV, dilute in 500 ml of fluid a administer no faster than 100 ml per ho *Special senses*—Tinnitus and vertigo h been reported occasionally. *Local reacti*—Excellent local tolerance demonstrated intramuscularly administered Linco (lincomycin hydrochloride). Reports of p following injection have been infreque Intravenous administration of Lincocin 250 to 500 ml of 5% glucose in distil water or normal saline has produced local irritation or phlebitis.

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How Organized Medicine "Stays On Top" Of Drug Crises

The way in which organized medicine is staying on top of crises is beautifully illustrated in an opinion on methadone voiced at the AMA meeting in New Orleans by C. B. Scrignar, M. D., of New Orleans, clinical assistant professor of psychiatry at Tulane.

Methadone is "no longer an experiment" but a "useful modality" that should be a part of every major city's rehabilitation program for heroin addicts, he said, continuing: it "has been around for ten years and is here to stay."

Dr. Scrignar expressed the opinion that private physicians should learn more about drug addiction but felt that it would be "a waste of the practitioner's time to treat the drug abuser one-on-one."

Which may be compared to the finding of the Council on Mental Health and Committee on Alcoholism and Drug Dependence, announced in March, 1971, and summarized in the AMA's quick reference guide in two paragraphs:

"The AMA recommends that methadone maintenance programs include at least: (1) facilities to collect and test urine for the presence of drugs; (2) general medical, psychiatric and hospital services; (3) adequate staff and (4) rigid controls of dispensing methadone to prevent illicit sale or intravenous use. It urges that evaluation and research of the programs be continued.

"The Association believes methadone maintenance is not feasible in the office practice of private physicians. The individual physician cannot provide all the services and controls required. Physicians should, however, cooperate with methadone maintenance programs in their communities and offer whatever services they may be capable of providing."

PRESIDENT'S MESSAGE

(Continued from Page 478)

provide an appropriate response to life-threatening, emergency situations; and

8) Facilitation of the physician's referral of appropriate patients by maintenance of an awareness of the community's various health facilities, agencies, and resources.

These educational guidelines won approval from the AMA House of Delegates.

Then the "Essentials of an Approved Educational Program for Urologic Physician's Assistants" was submitted by the American Urological Association.

This program will give you some idea as to just what is proposed that this individual be allowed to do. The following is the proposed list of activities that the Urological Physician's Assistants be permitted to do:

1. Take histories and give physical examinations
2. Perform urinalyses
3. Change and irrigate catheters
4. Perform semen analyses
5. Prepare patients for urologic examination, diagnostic studies, and surgical intervention
6. Aid urologist in urologic examination, diagnostic studies, and surgical intervention
7. Order, clean, sterilize and repair endoscopic and surgical equipment
8. Remove sutures
9. Remove catheters and drainage tubes
10. Dress wounds
11. Perform Cystograms
12. Perform urinary flow rate studies
13. Clean examining rooms
14. Perform intravenous pyelograms
15. Perform cystometrograms
16. Perform bladder irrigations

17. Take and develop urologic X-rays
18. Collect midstream specimens
19. Give injections
20. Catheterize patients
21. Dilate urethras
22. Perform renal function studies
23. Perform blood counts
24. Perform cultures and sensitivity studies of urine
25. Provide stomal and appliance care
26. Perform administrative procedures
27. Maintain and insert nasogastric suction
28. Maintain hemovac and chest tube suction
29. Make rounds with urologists
30. Write progress and discharge notes
31. Give special instructions to patients
32. Provide special care for acutely ill patients (septic shock, etc.)
33. Care for bleeding problems, draw blood for analysis, typing and cross matching
34. Start intravenous fluids
35. Give medications
36. Collect urine specimens for special study
37. Act as scrub nurse in the operating room
38. Dictate operations
39. Make house calls for follow-up or in emergency

The Urologist's Assistant Program did not pass the House of Delegates. It is my opinion it would have passed had one delegate not have gotten up and picked the program apart. The house then referred the program back to the committee for further study.

By full utilization of the urologist's assistant, one can realize that the only time that the urologist might see his patient would be in the operating room.

Medical ethics dictates that the physician must assume total responsibility for the care rendered his patient. We cannot permit inadequately trained personnel to perform those acts which either legally or traditionally are considered to be the practice of medicine. The use of ancillary personnel as ancillary personnel is one thing, but the use of such personnel as independent practitioners capable of making professional judgments is something else entirely different both legally and ethically.

All this commotion regarding the physician's assistants causes me to wonder why if such assistance to the physician is really needed, why organized medicine has not insisted on the use of the registered nursing profession. Registered nurses have proven themselves quite capable in the fields of anesthesia and intensive care. Organized medicine should have profited by this experience.

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He is Herbert Foster Gaines, born in Elba County, Georgia, May 7, 1897, the son of a merchant-farmer. He was the only one of three brothers going into medicine, the other two becoming pharmacists. The future Dr. Gaines took his pre-med schooling at Mercer, Macon, Ga., before going on to Emory, Atlanta, from which he received his M. D. degree in 1922.

Interning at Hillman Hospital, Birmingham, he has been in practice in the Magic City ever since, in internal medicine.

Dr. Gaines is married to the former Slayton McKillop of Mulberry, Fla., who was named for a kinsman, a onetime Governor of Georgia. No children have been born to them, but they have reared two foster daughters, the younger of whom is entering the University of Alabama this year, aiming at nursing for a career.

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FDA Changes Requirements On Prescription Drugs

The Food and Drug Administration has made final an Agency requirement that prescription drugs composed of more than one ingredient combined in fixed dosage form (a pill, capsule, teaspoonful) must offer the patient a therapeutic advantage over any of the components administered separately.

The new policy affects up to 40 per cent of widely sold prescription drugs. Over-the-counter drugs—those sold without prescription—will be dealt with separately.

The FDA policy on fixed combination prescription drugs is that:

(A) Two or more drugs may be combined in a single dose form when each contributes to the claimed effects. The dosage of each ingredient (amount, frequency, duration) must be safe and effective for a significant number of patients who require concurrent therapy with the drugs. Special cases of this general rule where an ingredient is added to:

—enhance the safety or effectiveness of the principal ingredient;
or

—minimize the potential for abuse of the principal ingredient.

(B) If a combination drug presently licensed is changed to meet new requirements based on a review for effectiveness by the National Academy of Sciences-National Research Council, then formulation, labeling, or dosage changes may be proposed and any resulting formulation may meet the basic requirement listed above.

(C) Any fixed combination drug for humans judged effective by FDA based on evaluation of the NAS-NRC reports meets the requirements of the policy.

On February 18, 1971, FDA proposed the policy on fixed combination drugs. The Agency received more than 1,000 letters from physicians and comments from medical and pharmaceutical groups. Apparently the proposal was not completely clear.

The final statement has been simplified. The primary change is the removal of over-the-counter drugs from the provisions of the proposed policy statement.

There was strong opposition to judging OTC drugs by the same criteria used for prescription drugs. FDA agrees that the differences in the two classes of drugs warrant separating the OTC drugs for separate consideration.

In addition the requirement that the combination drugs be useful for "most" patients for whom it would be prescribed has been changed to a "significant number," as defined in the labeling for the drug.

Basically the policy proposed in February 1971 is unchanged. The revisions state the requirements more broadly with the intention that they will provide a useful guide to industry in considering introduction of future combination products.

The policy statement, to be published in the October 15, 1971, FEDERAL REGISTER, will provide a clearer and more flexible amplification of FDA policy on prescription drugs in fixed combinations.

Not A Disease

Epilepsy is not a disease. It is a symptom of an underlying neurological disorder that results in seizures when too much energy is released from one or more brain cells at one time. According to the Epilepsy Foundation of America there are several types of epileptic seizures. Petit mal, characterized by brief lapses of consciousness, is often mistaken for "day-dreaming."

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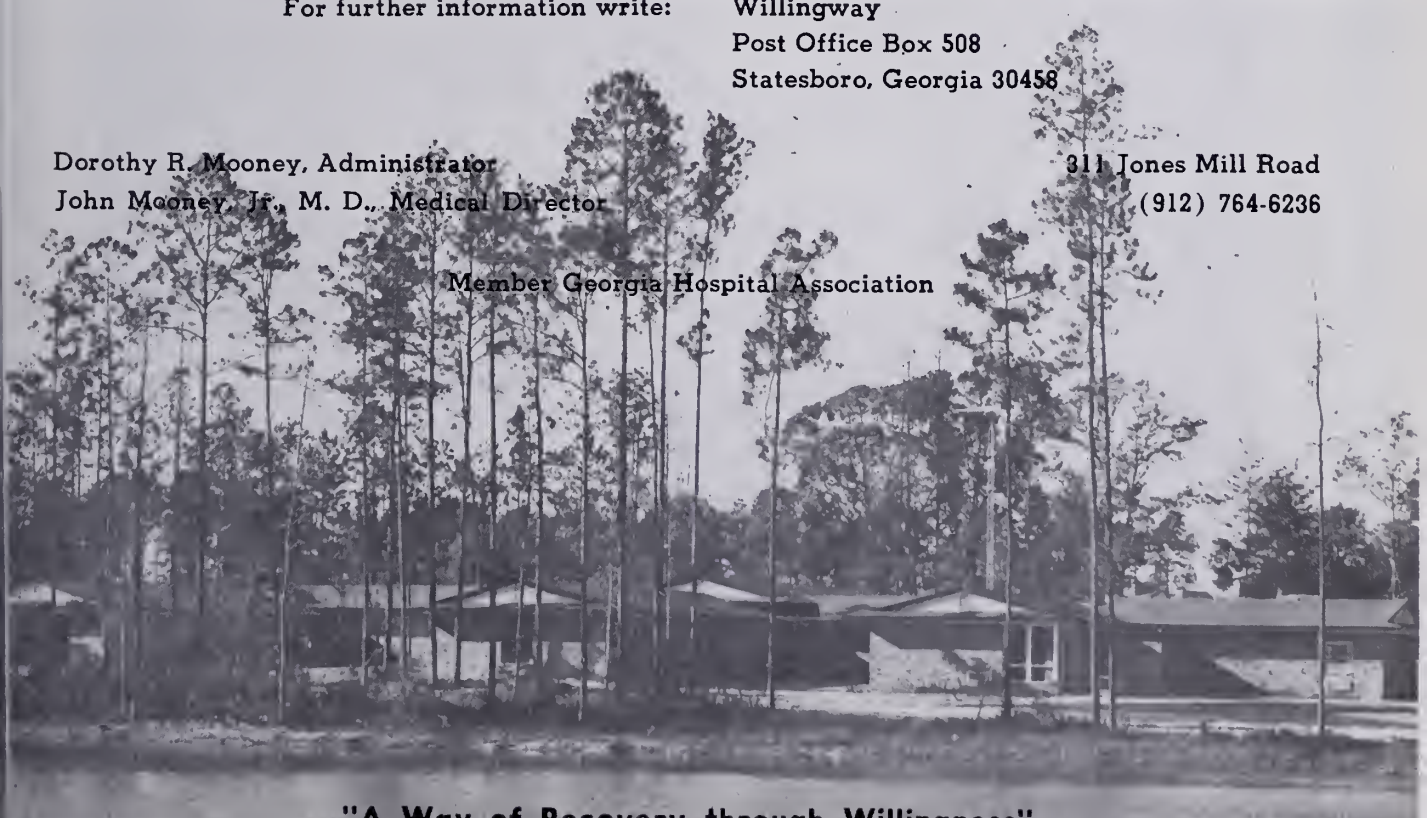
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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 41 January, 1972 Number 7

Relief Of Influenza Symptoms By The Provocative-Neutralizing Method A Preliminary Report

by

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The use of the Provocative-Neutralizing Method in cases of allergy to foods, inhalants, drugs, chemicals, Hymenoptera stings, Rhus dermatitis, resistant Candida infections, and infections due to pathogenic fungi has been reported by Lee, *et al* (1-5). The reported effectiveness of a single technique in so many different types of pathological conditions, including some caused by living organisms, suggested a trial for the treatment of infectious disease.

Influenza is one of many infectious diseases in which an antigen is available for Provocative-Neutralizing testing. Influenza occurs annually in large numbers over a short period of time, and there is a large susceptible population. Moreover, influenza vaccine reactions could serve conveniently as a first model for a study of vaccine reactions in general, since influenza vaccine injections are given in large numbers in a short season and are often followed by definite side-effects.

MATERIALS

Two influenza virus vaccines were available for clinical use during 1968-1969, (1) Influenza Virus Vaccine, Monovalent, Type A2, A2/AICHI/2/68 (Hong Kong Variant); 400 CCA units per cc*; and (2) Influenza Virus Vaccine, Bivalent, Types A2 and B, containing 150 CCA units per cc of A2 (Japan 170/62), 150 CCA units per cc of A2 (Taiwan 1/64), and 300 CCA units per cc of B (Massachusetts 3/66)**.

Each of these vaccines was prepared in 1:5 serial dilutions to make a total of nine vials for each of the two types of vaccine. The full-strength commercial preparation of each type vaccine was designated as the "concentrate." Thus vial number one was a 1:5 dilution of the concentrate; vial number nine was approximately a 1:2,000,000 dilution.

METHOD

The method of testing and treatment used was a modification of the Provocative-Neutralizing Method of Lee. This method was carefully studied and its effectiveness verified for foods and other antigens before the Influenza study was undertaken.

Lee's method is based on the intradermal

*The Merck, Sharp, and Dohme product was used in this study.

**The Lederle Laboratories product was used in this study.

injection of 0.05 ml of a particular dilution of an antigen, followed by observation of the patient for symptoms and signs of reaction for ten minutes, as well as the evaluation at ten minutes of changes in the size, color, shape, feel, and other characteristics of the wheal. Since symptom evolution is slightly slower with Influenza vaccine than with most other antigens, a 20 minute symptom observation period was generally employed, although wheal measurement was still made at ten minutes.

The appropriate choice of a starting dilution is discussed below.

The first injection often provokes symptoms and objective signs, or intensifies those already present. Evaluation of the symptoms, signs, and wheal characteristics provide guidelines which indicate the choice of subsequent doses, with the goal of finding a "neutralizing dose," which is supposed to relieve the symptoms, clear the signs, and produce a characteristic wheal pattern.

Wheal characteristics were found to be an important aid in arriving at a neutralizing dose. The shallow intradermal injection of 0.05 ml of any non-allergenic or control solution produces a wheal of approximately seven mm. In ten minutes, this control wheal may grow as much as 1½ mm, rarely more ("negative wheal"). By contrast, a "positive wheal" will usually grow 2 mm or more in diameter, or will be characterized by one or more other "signs of positivity."

The five *major* signs of positivity are: marked hardness, marked elevation, "paper-white" blanching, and thick discoid form (markedly circular with sharply demarcated, "cliff-like" edges). Erythema or pseudopodia may or may not be present. These major signs of postivity are almost always an indication of an "overdose," meaning that this dose is too strong to be a neutralizing dose, and that a weaker dose is indicated next in the search for a neutralizing dose. This is particularly true if two or more signs of positivity are present concurrently.

The most definitive and reliable single sign of positivity is the 2 mm growth in average wheal diameter. A 2 mm growth can be exemplified by a wheal of 7x8 mm at injection which is 9x10 mm in ten minutes, or 6x8 at injection and 7x11 in ten minutes, etc.

Experience with this method verifies that, *if a wheal grows 2 mm in ten minutes, this is almost always an overdose even if the patient has no symptoms, or even if he gets relief on this dose.* One must go consecutively weaker to the first dose which produces a wheal growth of *less than 2 mm* and, by comparison with a control wheal, is not relatively blanched, hard, elevated, or discoid, and on which no symptoms remain after 20 minutes. This is the *"neutralizing"* dose.

If ever symptoms worsen and persist on a small soft wheal, this is most likely an *underdose* and one must go consecutively *stronger* to reach the neutralizing dose. A neutralizing dose wheal is essentially negative (not an overdose wheal) and cannot usually be distinguished from an underdose wheal.

SYMPTOMS AND SIGNS OF REACTION

Symptoms and signs may be present before testing begins; if so, they should be recorded before testing, so that one will not later confuse them with the symptoms and signs provoked by testing. In this study, the symptoms and signs were the typical ones of reaction to influenza virus vaccine or of the active disease. These are discussed below, under Selection of Cases.

The main purpose of testing is to give relief by finding the relieving or neutralizing dose. The first dose tried may turn out to be the neutralizing dose; if so, the symptoms will clear within 20 minutes and the wheal will be negative. If symptoms do not improve, or if they become worse and remain so at the end of 20 minutes, the wheal

characteristics usually indicate the direction in which to seek a neutralizing dose.

Sometimes the symptoms will worsen temporarily, but still clear completely within 20 minutes. This is typical of a neutralizing dose. However, when such worsening first occurs, the physician does not know whether it is going to clear, persist, or get still worse. If such worsening occurs early in the observation period, the physician must evaluate it at that moment. If early worsening is only moderate and is tolerable, and the wheal is not yet definitely positive, one should try to wait the time out; it may still be the neutralizing dose. If the worsening is severe and the patient is unduly discomfited, a new dose can be given without delay in the search for a relieving dose.

In instances where the full 20 minute wait cannot be employed, the decision to move immediately stronger or weaker depends on the development of the wheal and the symptom pattern up to this point. If in the first few minutes the wheal already shows suggestive signs of increasing *positivity* and the symptoms are worsening, one should go *weaker*. If this was the correct choice, the patient will usually begin to improve within seconds or a few minutes. If the symptoms do not improve after the *second* injection, but are no worse, and the *first* wheal has now become *definitely* positive, one should continue going consecutively *weaker* to the neutralizing dose. Conversely, if the symptoms do not improve and do not become worse after the second injection, but the first wheal has now become definitely *negative,* one should go *stronger* to reach the neutralizing dose.

If the second injection had made the symptoms *worse*, this represents "worsening while going weaker," indicating underdosage symptoms, dictating the immediate need for the dose one dilution *stronger* than the original dilution which started the reaction. If this stronger dilution gives partial but not complete relief, it is followed by consecutively stronger dilutions until the neutralizing dilution is reached.

If the original wheal had shown no early developing signs of positivity, one would have first gone consecutively *stronger*. If this is correct, the patient will soon begin to improve. If incorrect, he may get still worse, indicating "overdosage symptoms," requiring the immediate need for the dose one dilution *weaker* than the original dilution which started the reaction. This is followed by consecutively weaker dilutions until the neutralizing dilution is reached. If, on any series of doses, the wheal is no help and the symptoms do not become either better or worse, continuing in the same direction is indicated until one encounters an overdose wheal or a worsening of symptoms, indicating a reversal of direction.

In any case, once the patient starts improving, one should try to wait out the 20 minute observation periods. If symptoms become better but are not completely cleared, one should continue going consecutively in the direction just found best, at 20 minute intervals, until symptoms completely clear.

Complete clearing sometimes takes longer than 20 minutes. If the patient is improving but not clear at the end of 20 minutes, an additional ten to 20 minute wait is indicated. If symptoms do not then clear completely, this is probably not the neutralizing dose. The additional ten to 20 minute wait is not used when the symptoms are the same or worsening; only if they are improving but not completely cleared, or if the wheal pattern suggests neutralization but the symptoms have not yet begun to improve. Conversely a new dose should usually not be applied if the symptoms are still improving on a negative wheal dose; an additional wait may give the symptoms time to clear completely, indicating that this is the neutralizing dose.

To summarize the neutralizing pathway: (1). If one goes too far in the direction of

strongness, symptoms may become worse, or the wheal may turn out to be positive; if so, one should drop back consecutively weaker for the neutralizing dose. (2). If one goes too far in the direction of weakness, the symptoms will get worse on a *negative* wheal; if so, one should advance consecutively stronger for the neutralizing dose. These two points make up the "Zig-Zag" rule, which states: "If worse, reverse."

The concept of symptoms being produced by an underdose and relieved by a stronger dose is startling to one who has not observed it. Apparently, it has never before been reported in medical literature, and represents a fundamental contribution by Lee.

STARTING DOSE FOR TESTING

The simplest technique in patients who are not sensitive to Influenza Vaccine is to start with 0.05 ml of the commercial concentrate and go weaker every 20 minutes until neutralization is obtained. (Caution: This is *not* the technique used for foods, inhalants, etc.!)

An alternative technique, used in more sensitive patients or in patients with histories of reaction to Influenza Vaccine, egg, feathers, or chicken, has been to start with 0.05 ml of Dilution No. 4 (1:625), or weaker. Then one must go consecutively weaker or stronger as indicated by symptoms, signs and wheal changes, keeping in mind the Zig-Zag rule, until the neutralizing dose is found.

An important point to consider in choosing any starting dose is the general level of sensitivity of that particular patient. Generally, the more sensitive patients are started on weaker dilutions. Also patients who have chiefly neutralized in weak dilutions, such as Dilutions ♯ eight or nine, on prior testing to other antigens, would be started in the general area of their previous neutralizing doses.

Since smaller-volume doses give milder symptoms than larger-volume doses, one may screen the very sensitive patient with a preliminary dose of 0.01 ml of the starting dilution. As this volume is difficult to visualize on the graduated syringe, it is the custom to use a dose criterion the volume of solution required to produce a 4 mm wheal. If the screening wheal is positive (grows 2 mm), consecutively weaker screening dilutions are indicated until the first negative wheal is obtained. If the screening wheal is negative, consecutively stronger screening dilutions are indicated until a positive wheal is obtained. In either case, the first *negative* dilution can then be used as the starting dilution for testing with 0.05 ml volumes. In at least 75 per cent of tests, the first negative dilution encountered when going weaker from the positive zone turns out to be the neutralizing dilution. If the concentrate produces a negative wheal, then the concentrate is usually the neutralizing dilution.

TREATMENT

Treatment consists in repetition of subcutaneous injections of the neutralizing dose whenever symptoms recur. In this study the patients (or other members of the family) were instructed in the technique of subcutaneous hypodermic injection so that they could give the injections at home whenever symptoms recurred. In order to facilitate self-administration, prevent errors, and make it easier to withdraw the proper dose from the vial, single dose 1 ml glass vials were issued to the patients, each containing one neutralizing dose (0.05 ml of the neutralizing dilution), mixed with 0.5 ml of phenolated saline.

PRECAUTIONS

It is surprising how definite a clinical reaction can occur within seconds or minutes after injecting 0.05 ml of a dilute solution of Influenza Virus Vaccine intracutaneously in some patients who can tolerate with no reported symptoms subcutaneous injections of

full immunizing doses of the undiluted vaccine.

In influenza testing, reactions tend to be more heightened than in food testing, since the patient is already sick and often feverish. The most common such reaction is a feeling of dizziness, faintness and weakness. This occurs chiefly in patients who give a history of a previous tendency to become easily dizzy, faint, and weak. Prior to testing, the question should be asked: "Have you ever fainted, passed out, lost consciousness, or had severe dizzy or weak spells?" Such patients are tested while sitting near or in a reclining chair, so that if they start having these symptoms, they can move into the reclining chair to alleviate their fear of falling. Patients with a history of fainting suddenly without a warning prodrome are placed in the reclining chair before testing begins. This is usually the only treatment required, other than changing doses as indicated by the symptoms, signs, and wheal changes.

A complete armamentarium of emergency medications and equipment must be at hand in all allergy testing, particularly epinephrine. However, epinephrine usually requires three minutes to begin to take effect; a neutralizing dose often begins to take effect in 30 seconds or less. Thus, an immediate change in dosage is usually the most efficient manner of handling such cases. If the patient begins improving soon, one can usually delay the use of epinephrine while one continues to seek the neutralizing dose. If the patient is becoming persistently or rapidly worse, epinephrine may be used. When epinephrine is required, a long lasting type such as Susphrine (R) (Cooper) is preferred, to prevent possible later relapses. Antithistamines, steroids, and other supportive measures may then be instituted if deemed necessary.

RETESTING

If the neutralizing dose originally found continues to give good results, retesting is not necessary. However, if the vaccine should ever become ineffective, the test should be repeated. Almost invariably, it will be found that the neutralizing dose has changed, and that the new neutralizing dose restores the beneficial response. In an occasional patient with changeable neutralizing doses, retesting may need to be repeated several times.

To retest, one gives the old neutralizing dose first. If the wheal is not an overdose wheal, and symptoms do not occur, or occur and clear within 20 minutes, this is still the neutralizing dose. If the wheal is an overdose wheal, one goes consecutively weaker to obtain the first negative wheal on which symptoms are relieved. If the patient has persistent symptoms on administration of the old neutralizing dose, and the wheal is negative, one goes consecutively stronger until the dose is reached which clears the symptoms but still produces a negative wheal. If while going stronger, the neutralizing dose is not recognized, one will finally reach a positive wheal dose, which indicates dropping back consecutively weaker again until symptoms clear on a negative wheal. If the patient is unable to communicate symptom changes adequately, the first negative wheal dose is used as the presumptive neutralizing dose.

SELECTION OF CASES

The cases selected for study were those who presented themselves with symptoms of vaccine reaction after receiving immunizing doses of influenza vaccine, as well as those with the typical symptoms of acute influenza virus disease.

All the cases diagnosed as clinical influenza had the typical malaise and complained of "aching all over." Most had fever, anorexia, cough, fatigue, slight vertigo, and generalized weakness. In addition some had headache, sore throat, serous nasal discharge, nausea, vomiting, or abdominal cramps.

It is interesting that only one patient (R.R.) wheezed despite the fact that most

were asthmatics; this patient had a history of bacterial sinus infection with intermittent wheeze just before onset of the influenza. Her own opinion was that her wheeze was only slightly increased, if at all, by the onset of influenza.

RESULTS

Results were divided into four categories:

1. Complete Results, consisted of those patients whose symptoms were completely relieved in the office during testing and who were able to maintain complete symptom-relief and continue full activity, although in some cases this required several repetitions of the neutralizing injections at home when symptoms recurred.

2. Marked Results, consisted of those patients obtaining immediate, marked, but not quite complete relief. Most could resume full activity within three days or less. The patients were quite comfortable as they could regain almost complete relief by giving themselves neutralizing injections whenever the symptoms worsened.

3. Moderate Results, consisted of those patients who obtained definite but only partial relief after each neutralizing injection, with persistence of slight symptoms between injections, and requiring more than three days of therapy before becoming entirely symptom-free and resuming full activity.

4. No Results, consisted of patients with no benefit whatsoever.

DISCUSSION OF RESULTS

A total of 35 cases were included in this study; 45 per cent had Complete Results, 31 per cent Marked, 20 per cent Moderate, and four per cent None.

In patients who had reactions to immunizing doses of influenza virus vaccine, the single neutralizing dose found by testing in the office was usually all that was required for immediate and lasting relief. (Exceptions: one case required three doses and one case four doses). In patients with active influenza virus disease, the injections had to be repeated at intervals until the disease apparently ran its course. In the active disease, the neutralizing dose found by office testing relieved the patient for variable periods, averaging around two to six hours. When the symptoms recurred, a second injection relieved symptoms within ten to 20 minutes, with relief characteristically lasting six to ten hours. Then a third injection relieved symptoms within ten to 20 minutes, this time lasting approximately ten to 14 hours.

Thus, a total of three neutralizing doses were usually required for patients with active influenza disease within the first 24 hours, i.e. one in the office and two at home. After that, if further neutralizing doses were required, each dose usually gave at least 24 hours relief. An average of eight injections of neutralizing doses (range three to 19) were required to relieve active influenza disease. Case No. 9 (G.B.) kept herself symptom-free and at work over a period of 15 days with 18 injections; then after a subsequent 13 day symptom-free period without injections, she had a recurrence of all symptoms, which were promptly and permanently cleared by a single additional neutralizing dose. In case No. 7 (O.C.), two relapses occurred, one after a five-day symptom-free period and one after an additional 16-day symptom-free period; each relapse was promptly and completely cleared with a single neutralizing dose.

In all relieved patients, symptoms other than fever were relieved within a range of seven to 30 minutes after injection of each treatment dose. As a rule, the fever subsided after the second or third injection.

The concentration of the neutralizing dose usually remained constant, and repeatedly gave satisfactory relief. In four cases, however, the first neutralizing dose later became ineffective or occasionally symptom-provoking, so that retesting was necessary to find a

new neutralizing dose, which then was invariably effective in giving relief.

The vaccine reactions appeared to be due to the virus antigen itself and not to extraneous material such as egg in the culture medium, since the symptoms of reaction were typical of influenza (muscle aches, sore throat, etc.), were relieved by influenza vaccine neutralizing doses, and were not correlated with dietary egg sensitivity. The question of allergy to egg, feathers, or chicken was anticipated and sought for, but no evidence of it arose.

Symptoms produced by one of the two types of vaccine could be completely relieved, as a rule, only by using neutralizing doses of that same type vaccine. Symptoms were sometimes aggrevated by deliberate attempts at neutralization with Hong Kong vaccine for known Bivalent Flu vaccine reactions, and vice versa.

Two patients (G.B. & H.H.) with active influenza improved on attempted neutralization with Bivalent Vaccine, but did not clear completely until neutralized with Hong Kong Vaccine. It is interesting that the concentration of Hong Kong which cleared them completely was the same as the concentration of Bivalent which had been their best dose but had cleared them only partially, and the wheal sizes were identical. Thus, the two types of vaccine seem to have partial, but not complete, antigenic cross-over.

CASE REPORTS

(1) Case ♯1: AM, a 44-year-old white female with perennial allergic rhinitis, presenting five days after receiving an immunizing dose of 0.3 ml of Hong Kong Vaccine subcutaneously, with a constant dull headache, persisting since the day after receiving the immunizing dose. As previous tests for other antigens had resulted in neutralizing doses chiefly in the eighth and ninth dilutions, her first test dose was 0.05 ml of No. 8 Hong Kong Vaccine. This produced a wheal of 8 mm at injection, growing to 10 mm in ten minutes, and causing worsening of the headache, pain in her chest, flushing, shortness of breath and nausea. Her second test dose was 0.05 ml of No. 9, which produced a wheal of 7x8 mm at injection, growing to 8x9 mm in ten minutes, and partial clearing of symptoms—including the headache—in ten minutes. The symptoms continued to improve, and after an additional 20 minute wait, they had all cleared completely and did not recur.

(2) Case ♯2: MKW, an 11-year-old white female, with allergic gastroenteritis and multiple food and chemical intolerances, presenting with slight vertigo, drowsiness, flushing, abdominal pain and "aching all over," 24 hours after receiving her first immunizing dose of Hong Kong Vaccine, 0.1 ml intradermally. Her first test dose was 0.05 ml of Hong Kong concentrate, which produced a wheal of 6x8 mm at injection, growing to 9 mm with erythema at ten minutes, and causing a slight worsening of symptoms. Her second test dose was 0.05 ml of No. 1 Hong Kong Vaccine, which produced a wheal of 6x7 mm at injection, growing to 7x8 mm in ten minutes, with complete clearing of symptoms. Symptoms returned at 24 hour intervals for three additional days, and were cleared each day within 20 minutes by a single neutralizing dose.

(3) Case ♯3: MB, a 51-year-old white asthmatic female, presenting 24 hours after receiving her first immunizing dose of Bivalent Influenza Vaccine, 0.1 ml intradermally, with congested nose and hoarseness since eight hours after receiving the vaccine.

Her first test dose was 0.05 ml of No. 2 Bivalent Vaccine, which produced a wheal of 7 mm at injection, growing to 8 mm in ten minutes, with partial clearing of the nasal congestion at the end of ten minutes. After an additional five minute wait, both the nasal congestion and the hoarseness were completely clear, and did not recur.

(4) Case ♯4: PE, a 49-year-old white female with allergic gastroenteritis, developed

severe adbominal cramps, flushing, and clear nasal discharge beginning 15 minutes after receiving an immunizing dose of 0.1 ml Hong Kong Vaccine intradermally. With her knowledge and consent, an attempt was made to neutralize her Hong Kong Vaccine reaction with Bivalent Vaccine, as a test of antigenic cross-over.

The first test dose was 0.05 ml of No. 4 Bivalent Vaccine, which produced a wheal of 7x8 mm at injection, growing to 9x10 mm in ten minutes, and causing a worsening of symptoms. Doses No. 5 and 6 also produced positive wheals and did not relieve symptoms. Dose No. 7 gave partial relief with a negative wheal. Doses No. 8 and 9 made her worse again, with severe abdominal pain, and negative wheals. A return to Bivalent No. 7 gave her partial clearing of symptoms again. A change to Hong Kong No. 7 cleared he symptoms completely and dramatically. Symptoms recurred at home in four hours, and were completely relieved in ten minutes with Hong Kong No. 7. They recurred once more three hours later, and again were completely relieved in ten minutes with Hong Kong No. 7. There were no further recurrences.

(5) Case ♯5: ME, a 53-year-old white asthmatic male, with low grade fever, cough, nasal congestion, drowsiness, and "aching all over" for 48 hours. His first test dose was a screening dose of 0.01 ml of No. 2 Hong Kong Vaccine. This produced a 4x5 mm wheal, growing to 5x7 mm in ten minutes, and causing no change in symptoms. The second dose was 0.05 ml of No. 2 Hong Kong, which produced a 6x7 mm wheal on injection, growing to only 7x9 mm (flat, flesh-colored) in ten minutes, and causing no change in symptoms. The third dose was 0.05 ml of No. 1 Hong Kong which produced a 6x8 mm wheal at injection, growing to 8x9 mm (flat, flesh-colored) in ten minutes. It caused momentary wheezing at 3 minutes but partial improvement in ten minutes, and complete clearing of all symptoms after an additional ten minute wait. Symptoms did recur the next morning, but were mild, and no further neutralizing doses were necessary. After three days of progressively milder symptoms, the illness apparently had run its course and symptoms did not recur.

(6) Case ♯6: MR, a six-year-old colored female with asthma and eczema, presented with high fever, vomiting, cough and "aching all over" for 24 hours. She was sad, serious, anxious, and lay flaccid and lifeless on the examining table, except for almost constant scratching of her skin. The first dose, a screening dose of 0.01 ml of No. 4 Hong Kong Vaccine, was negative. Then successively stronger doses (0.05 ml of No. 4, 3, 2, 1 and concentrate) were given at ten minute intervals, all producing negative wheals. None affected the symptoms until the dose of concentrate (negative wheal) was given, after which she promptly quit scratching, sat up voluntarily, and began smiling and playing. Symptoms recurred three hours later at home, and again were neutralized in 20 minutes with concentrate. They recurred 15 hours later, were cleared in 20 minutes with concentrate, and did not recur again.

(7) Case ♯7: OC, a 52-year-old white asthmatic female, presenting with a dry throat, a burning sensation in her nose, eyes watering, nausea, headache, low grade fever, and "aching all over." Her first test dose was 0.05 ml of Hong Kong concentrate, which produced a 7x9 mm wheal at injection, growing to 9 mm in ten minutes and causing dizziness, headache, depression and worsening of her previous symptoms. Her second dose was 0.05 ml of No. 1 Hong Kong, which produced a 6 mm wheal at injection, remaining 6 mm at the end of ten minutes, and causing complete clearing of the dizziness, headache, depression, and all other symptoms. Three additional neutralizing doses were required in the next 24 hours, at eight, 13, and 20 hours after testing. She then discontinued treatment. Five days later she returned with a recurrence of eye watering, with severe edema, purplish discoloration, and excoriation of the lower lids. The eye

watering, edema, and discoloration cleared markedly in the office within 30 minutes after retesting with 0.05 ml of No. 1 Hong Kong. Sixteen days later she experienced a recurrence of all the symptoms which had accompanied her original attack described above. Retesting with 0.05 ml of No. 1 Hong Kong gave only partial relief. Testing with 0.05 ml of No. 2 cleared the symptoms completely. Five more neutralizing doses (No. 2) were used, one daily for five days, although there were no symptoms during this period, and no further relapses. This is an example of two relapses of the illness, and also of a change in end-point.

(8) Case ♯8: BJ, a 15-year-old white male with perennial allergic rhinitis and asthma, presenting with headache, tightness in the chest, sore throat, knee and chest pains, dizziness, and nausea of three days duration. All his symptoms improved markedly on No. 2 Hong Kong vaccine, but he then complained of feeling very tired. He was given No. 2 Bivalent Vaccine to see if the "tiredness" could be relieved, but this made his symptoms return slightly, and did not relieve the tiredness. Another test dose of No. 2 Hong Kong Vaccine cleared the symptoms, but the tiredness remained. This exemplifies the fact, borne out in subsequent cases, that the onset of fatigue is apparently part of the neutralizing syndrome in some cases, so that when all acute symptoms clear and the patient then complains only of being tired, this should be accepted as his neutralizing dose without trying to neutralize the sense of fatigue. It is probably a physiological letdown phenomenon following cessation of the tension and discomfort of the acute symptoms.

(9) Case ♯9: GB, a 54-year-old white asthmatic female with typical influenza symptoms, who cleared on No. 5 Bivalent Vaccine except that she continued to feel weak. The feeling of weakness cleared completely when she was switched to No. 5 Hong Kong Vaccine. This exemplifies the fact, confirmed in other cases of active influenza, that when a particular dose of one of the vaccines was the "best" dose of that vaccine but was still not good enough for complete neutralization, the identical concentration of the other vaccine was usually the perfect neutralizing dose. This again indicates partial, though incomplete, antigenic cross-over.

This patient is also interesting from the standpoint of requiring 19 neutralizing doses over a period of two weeks—more than any other patient in this series—before the illness finally ran its course.

COMMENTS

Many objections can be raised to a spontaneous, uncontrolled, clinical study of this type. Nevertheless, the response was rapid, clear-cut, patternized, repeatable, and effective in a percentage much higher than could be accounted for by a placebo response. There was no question of suggestion, as the whealing response is not under the control of either the patient or physician, and neither knows in advance which dose is going to worsen or improve the symptoms. In this early stage of our progress in the science of immunology, it does not seem appropriate to ignore data obtained by clinical observation because of lack of knowledge concerning mechanisms of action. Clinically, the method works, and works well. While the study was small, the possible clinical and research implications are great.

If test vaccines were available for each of the single strains of influenza virus, the provocative technique might prove to be an effective and rapid method of differentiating one strain of influenza virus from another by clinical testing in the office. In addition, a comprehensive mixed influenza virus vaccine might prove useful in distinguishing influenza virus infection from non-influenza virus infection, bacterial infection, etc. The same techniques might be applicable to the study and therapy of other infectious diseases for which antigens are available, such

as pertussis, diphtheria, tetanus, poliomyelitis, mumps, measles, rubella, typhoid, typhus, cholera, yellow fever, rabies, etc. Reactions to such antigens and to other biological extracts might also be managed in this manner. In like manner, when an atopic patient experiences a reaction to his allergy treatment vaccine, the reaction can usually be quickly cleared by administering consecutively weaker (1:5) dilutions of his own vaccine at ten to 20 minute intervals. Preliminary data are being accumulated indicating effectiveness in several of the situations.

SUMMARY

The effectiveness of the Provocative-Neutralizing Technique for the relief of the symptoms of influenza virus disease and of influenza virus vaccine reactions was studied. The method was effective in 96 per cent of cases. When the neutralizing doses were administered, 45 per cent became completely symptom-free and 51 per cent nearly so, within ten to 20 minutes. If symptoms recurred, they were quickly relieved by another injection of the neutralizing dose. This may represent a new research tool in immunology and a new therapeutic modality in infectious diseases and biological vaccine reactions as well as in clinical allergy and allergy vaccine reactions. It is hoped that larger investigations with suitable controls will be stimulated by this small clinical study.

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DRUG WARNING

Harold Klingler, M. D.

Diplomate—American Board of Obstetricians and Gynecologists

Director, Bureau of Maternal and Child Health

Alabama Department of Public Health

A unique and previously unsuspected medical problem has arisen. It has been found that female offspring of women given diethyl stilbestrol medication during pregnancy developed vaginal malignancy as long as fifteen to twenty-five years subsequent to the maternal exposure. A total of some sixty cases have accumulated, and the figures involved are felt to be of statistical significance.

The use of diethyl stilbestrol (DES) in the treatment of threatened abortion and miscarriage was a rather popular treatment for this condition during the sixth decade of this century. However, since the introduction of progesterones the popularity of the diethyl stilbestrol treatment has diminished.

The Food and Drug Administration has prepared labeling specifically stating the use of diethyl stilbestrol in known pregnant patients is contraindicated.

Supervision Of Tuberculosis Outpatient Chemotherapy

Thomas Moulding, M. D.

Ann Arbor, Michigan

One of the major problems in TB control today is the patient's failure to continue taking his drugs once he leaves the hospital. Patients who are treated and lost—and perhaps treated and lost again—are a serious health threat to themselves and others.

Dr. Thomas Moulding of the National Jewish Hospital at Denver outlines effective techniques of drug supervision by TB clinics for nearly all situations. He covers keeping track of patients in a mobile population, spotting the poor drug taker, dealing with uncooperative patients, costs, and other essentials of a well-supervised outpatient chemotherapy program.

Eleven years ago in Madras, India, it was clearly demonstrated that treatment of TB patients with isoniazid and PAS administered at home could be as effective as hospital treatment with the same drugs.[1] Equally important, there was apparently no increased risk of transmitting tuberculosis to the contacts of the patients treated at home.

The Madras demonstration, of crucial importance to the developing nations, is almost as important to countries like the United States where, previously, treatment was given in the hospital. At a minimum the Madras study suggests that hospitalization for cases of uncomplicated tuberculosis need not be prolonged and that, after an initial period of hospital treatment, chemotherapy can be continued on an outpatient basis.

Thomas Moulding, M. D., is a staff physician of the National Jewish Hospital at Denver and coordinator of their Tuberculosis Training program. Dr. Moulding is also assistant professor of medicine at the University of Colorado School of Medicine and a member of the Board of Directors of the Denver and Tri-County Tuberculosis Association.

The problem with this approach is that drug treatment must be maintained for a year and a half or more, and many people fail to take their medication regularly or discontinue it completely when they leave the hospital. This is now recognized as a problem of major importance in the treatment of tuberculosis.

In dealing with this problem, it is essential that each patient be carefully educated about the importance of uninterrupted, prolonged chemotherapy and that high-quality, convenient, personalized services be offered to each and every tuberculosis patient so that it will be easy for them to complete the full course of chemotherapy. These first-priority activities are well discussed elsewhere.[2] In addition, it must be recognized that even with perfect patient education and ideal clinic services there will be some patients who become treatment failures because they won't follow through.

These cases can be exceedingly frustrating to health department personnel. Too frequently, little or nothing is done about their breaks in treatment until their disease has relapsed to sputum-positive status. At that point, they are usually rehospitalized, often under court order or threat of it. If one wants to avoid using force, the answer is to deal with the problem when breaks in treatment first occur, through careful supervision of outpatient chemotherapy. Effective techniques of supervision for nearly all situations have been developed.

What are these techniques?

The lost-patient problem

The first essential is not to lose the patient or to find him quickly if he does become lost.

To accomplish this, one needs to gather enough information about each patient when he is first seen so that he can always be found. Very few people in this world really drop out of sight. Except for the truly homeless male, most people maintain contact with some relative or friend no matter where they go, and often when they move they are simply making extended visits to the homes of relatives. Therefore, as a simple preventive measure, the Denver Health Department is now collecting the following information, where applicable, on all patients:

1. Name (and maiden name, in case of married females)
2. Address and former address
3. Social Security number
4. Name and address of present and former employers
5. Mother, father, brothers, sisters, spouse, children, personal friends
6. Church and other organizations to which patient belongs
7. Insurance companies, especially life insurance companies with which he has policies
8. Patient's present and former private physicians
9. Persons and places visited in the last five years

With this battery of information it should be fairly easy in most cases to quickly locate patients who become lost to supervision.

As further protection against losing patients, it is exceedingly important that careful plans be made when the TB patient moves from one place to another. When a patient is about to leave the hospital to go home, to move from one community to another, or to change physicians, communications should precede the move, setting up a definite source of chemotherapy and medical management at the new location. Frequently, however, patients change their minds and do not move or for one reason or another do not reach the new location. For this reason there needs to be a system of checking to make sure that the patient has really moved. The Denver Health Department, through its case registrar, routinely queries the patient's new physician or the treatment center at the patient's new location six weeks after the supposed move to see whether the patient has arrived. If he has not, a search for the patient is immediately instituted.

It is a frequent experience for health departments to learn that a patient has moved to the community many months after the patient has arrived. In this era of modern communications, why are there such long delays? The apparent explanation lies in the tortuous channels through which the notification passes. For instance, on a between-state move, the notice will frequently go from the city clinic to the city register, to the state register, to the register in the new state, and finally to the city where the patient has moved. At any place along this chain, should the register clerk be sick, on vacation, overburdened with work, or unavailable because the position is temporarily unfilled, the passage of information will be delayed. The obvious solution is for the initiating agency to send one copy of the notice through channels and a second copy directly to the health department which must assume responsibility for the patient.

Finally, the most important step in finding, or in not losing, a patient is to respond promptly to the first indication that he may be lost to supervision—usually a missed clinic visit. If he has moved, the likelihood of finding someone who knows his new address is greater if not too much time has elapsed. If he has not moved, prompt attention to a missed clinic visit will reduce therapy interruption to a minimum and impress upon the patient the importance of continued medical care and regular drug-taking.

Supervision of drug treatment

Spotting the poor drug-taker. The objective of any supervision system is to identify, as quickly as possible, those patients who either are not taking their medication or will probably be future problems, so that they can be given special attention.

The first clue can come from observation of the patient in the hospital. Take, for instance, the case of a 40-year-old man who was admitted to a tuberculosis hospital several years ago with moderately advanced tuberculosis. When he was on the ward he had frequent emotional outbursts, fought with nearly all of the ward personnel, and fought with his wife, who was also a patient. Before finally leaving the hospital six weeks later against medical advice, he had walked off the ward several times for periods of twenty-four to forty-eight hours. In view of his behavior it was fairly obvious that he was going to require exceedingly careful supervision, either on an inpatient or outpatient basis, if he were ever to complete an effective course of chemotherapy. This type of supervision was not immediately instituted, and his course has been characterized by irregular clinic attendance, repeated hospitalizations, and intermittently positive sputum.

Similarly, people who have other difficulties in adapting to society, which become manifest in frequent job changes, marital problems, alcoholism, lone-wolf type living, encounters with the law, and frank psychological disturbances, probably are more likely to be irregular drug-takers. This needs to be studied in detail, but until such studies are available, it would seem reasonable to make note of these problems during the patient's first hospitalization and make provisions for more careful supervision of his drug treatment.

Clinic checking systems. The next step in identifying the irregular drug-taker is to look for irregularity in clinic attendance. Most people responsible for TB outpatients feel that the person on chemotherapy, especially during the first year, should be seen no less often than once a month in order to repeatedly stress to him the importance of continued, uninterrupted chemotherapy. If the patient is given only enough medication to last a week or so beyond the next clinic visit, these visits can serve as a rough check on the regularity of his drug-taking. If the patient does not keep his clinic appointment or does not request the proper amount of medication at each clinic visit, he has probably interrupted his therapy. One refinement of this technique is to give the patient approximately five weeks' supply of drugs and tell him to return in four weeks with the unused medication. If there is too much medicine in the bottle, the patient is probably skipping his medication.

The essential records for this checking system are an appointment book or tickler file and an accurate record of the amount of medication dispensed. In addition, at the Denver Health Department, weekly rosters are prepared, listing all patients on therapy who have missed their clinic appointments, in order to make certain that they are promptly and persistently pursued until clinic appointments are re-established. This prompt follow-up, tactfully managed by phone calls or home visits, is probably the most important supervisory measure needed to maintain TB patients on continuous outpatient chemotherapy. Unfortunately, this simple technique is glaringly neglected by far too many health departments.

Urine tests for the presence of medication can also be employed to detect irregular drug ingestion. These have been developed for quite a few drugs. It is relatively easy to collect urine when the patient comes in for a clinic appointment. The limiting feature of tests run on clinic-collected urines is that they indicate only whether or not the patient has taken medication in the twelve to thirty-six hours prior to his coming to the

clinic and nothing about the rest of the month.

Other techniques. The measures listed above, as useful as they are, cannot identify every patient who is not taking his medication. Therefore, checking systems based on home visits have been tried. The acme of home-visit checking systems was tried in India by the Madras Chemotherapy Center, where every patient was required to return to the clinic once a week for medication refills. A urine specimen was taken then and there to test for the presence of drugs. In addition, two or more home visits were made each month to count the remaining stock of medication and to collect a urine specimen. At least one of these home visits was a surprise visit. With this type of supervision, very good though not perfect outpatient drug ingestion was achieved, and home therapy of tuberculosis was shown to be as effective as hospital therapy. To the best of my knowledge, no health department in the United States has ever instituted such a program, and I doubt very much that they ever will as a routine measure. However, for the difficult patient who has left the hospital against medical advice, for the one who refuses to be hospitalized in the first place, or for any patient who is known or suspected to be irregular in taking his medication, such intensive supervision might work.

Several years ago the idea of attaching medication to a calendar was tried among Navajo Indian tuberculosis patients attending the Navajo-Cornell Field Health Clinic.[3] The idea was to remind the patient to take his medication and prod his conscience, should he forget. The calendar has the added advantage that the family can check on whether or not the patient is taking his medication regularly and thus help to supervise him. Furthermore, a nurse making a home visit can easily check on the amount of medication consumed without going through an embarrassing pill count. For isoniazid and PAS drug administration, the large number of pills will not fit on a calendar; therefore, a verticle-type calendar box has been introduced in two clinics in Denver, with the help of the Denver and Tri-County TB Association.

This verticle type calendar box has been further modified to determine the regularity with which patients take medication by means of radioactive material and photographic film.[4] In a field trial utilizing this device, twenty seven percent of patients were found to be taking medications so poorly that they required special measures to insure regular drug ingestion.[5] This device provides the most effective method for identifying poor pill takers.

Dealing with uncooperative patients

The institution of the supervision procedures outlined above would probably serve to motivate many marginally cooperative patients to continue their drug-taking, but no matter what methods are tried, there will be some patients who do not take their medication. What should be done in this situation? One approach is to try to find some strong member of the family or some strong-willed neighbor who can take over supervision of drug administration in much the same way as the nurse on the hospital ward. The use of calendar-type drug administration simplifies this measure.

When it is not possible to employ this technique, the health department could assume responsibility for directly administering medication. Dr. Allan Moodie has described a program in Hong Kong involving twelve thousand new active TB cases a year in which the patients were required to visit a clinic six days a week for the first twenty-four weeks of therapy.[6] These patients received a full daily dose of isoniazid, streptomycin, and liquid PAS. To further simplify such completely supervised drug administration, the Madras Chemotherapy Center compared higher-than-conventional doses of isoniazid and streptomycin, both given twice a week, with usual doses of isoniazid

and PAS given twice a day and found the twice-weekly isoniazid and streptomycin at least as effective as isoniazid and PAS twice a day.[7]

Several years ago the Denver Health Department instituted an outpatient program of 27 mg/kg of streptomycin and 14 mg/kg of isoniazid both given twice a week for fifty six unreliable patients.[8] Despite their difficult behavior fifty five of these patients were successfully treated.

The cost of well-supervised outpatient chemotherapy

If the measures outlined above were generally instituted, there is no question that public health departments would have to spend more money on outpatient care, but the over-all effect would be a large monetary saving.

According to the report of the Surgeon General's Task Force on Tuberculosis Control, $335 million, or one-third of a billion dollars, is being spent every year for hospitalization of tuberculosis patients. All other expenditures for tuberculosis control, such as tuberculin-testing programs, X-ray screening programs, supervision of inactive cases, diagnostic work-ups, and contact investigation, in addition to outpatient treatment, amount to only $45 million.

These figures make a strong case for shifting a small portion of the money now being spent on hospitalization to outpatient treatment programs. If this were done, the supervision systems outlined above could easily be instituted, hospitalization markedly shortened, and a large portion of the third of a billion dollars would be saved. Consider the savings in outpatient supervision in the extreme case of a patient who is so uncooperative that a nurse is required to make a home visit once a day to administer medication. In Denver this would cost about $12 a day, against hospitalization costs of over $40 a day. Since such measures would be needed only for the most difficult of individuals, the monetary savings resulting from outpatient treatment programs should be self-evident.

Humane treatment through supervision

A frequently voiced objection to such an outpatient supervision program is that it requires too much "policing." However, the program as outlined above is an effort to avoid force and still achieve a noninfectious status for all patients, cooperative and noncooperative, by maintaining contact with them, checking on them, encouraging them, persuading them, or directly administering the medication if necessary. At no time are legal coercive measures suggested unless all else fails. If this role is still regarded as "policing," then it needs to be pointed out that such "policing" of drug administration for a patient who is otherwise free to pursue normal activities is far kinder than to interrupt his life by incarcerating him in a hospital simply to ensure drug administration or because his disease relapsed due to premature discontinuation of therapy.

In the management of tuberculosis in the United States today, there is a gross dichotomy in our thinking and practices. On the one hand, because the reliability of patients is doubted, some hospitals in the country keep patients for long periods of time simply to ensure that they take their medication. On the other hand, when the patients are discharged, the administration of medication is left almost entirely up to them.

Human nature, by and large, is not so bad that restraint in hospitals is required to ensure administration of drugs nor so good that all patients can be completely trusted to take medication by themselves. What is obviously needed is some intermediate approach between these two extremes. This approach can be provided by well-supervised outpatient chemotherapy, with great benefit to the patients and marked savings for the taxpayers.

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Soft Contact Lens Useful In Treating Eye Disorders

In addition to visual correction, the new "soft" contact lenses have an important, unexpected use in the treatment of various eye disorders and conditions, according to investigators at Manhattan Eye, Ear and Throat Hospital, New York City.

Their ability to absorb moisture, such as medications, and to release it slowly when placed on the eye is currently being exploited for control of glaucoma. Preliminary tests in patients indicate that a significant drop in intraocular pressure is achieved when standard drugs are applied in this manner.

Another use is following cataract surgery when the patient usually needs a strong convex lens to replace the optical power of his natural lens. Since the refractive state varies as healing progresses, prescribing spectacles is not practical and a hard contact lens retards healing. Soft contact lenses, however, adequately correct vision while their bandage properties promote healing. Also, if the refractive state later changes substantially, it is a simple matter to substitute a new lens.

The investigators also report success of soft contact lenses in treating bullous keratopathy, a painful and sometimes blinding disease characterized by blistering of the corneal epithelium and edema. In 26 cases, immediate relief from pain was dramatic and visual acuity increased notably in most instances.

Furthermore, soft lenses are proving effective in patients with keratoconus, a progressive cone-like protrusion of the cornea due to a structural weakness of the tissue. Visual distortion caused by the condition cannot be corrected by ordinary spectacles and hard contact lenses are frequently poorly tolerated or fail to retain their position on the cornea. In cases treated so far with soft lenses, excellent tolerance and centration is reported. Although visual acuity may not be fully corrected by the soft lens, it can be if a spectacle is also worn. (Principal Investigator: Herbert M. Katzin, M. D.)

The John A. Hartford Foundation, Inc. Bulletin, Oct. 1971.



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1. Demeulenaere, L.: Action du R 1132 sur le transit gastro-intestinal, Acta gastroent. Belg. 21:674-680 (Sept.-Oct.) 1958.

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Precautions: Lomotil is classified as a Schedule V substance by Federal Law with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving addicting drugs. Recommended dosages



should not be exceeded, and medication should be kept out of reach of children. Signs of accidental overdosage may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia; continuous observation is necessary. The subtherapeutic amount of atropine sulfate is added to discourage deliberate overdosage.

Adverse Reactions: Side effects reported with Lomotil therapy include nausea, sedation, dizziness, vomiting, pruritus, restlessness, abdominal discomfort, headache, angioneurotic edema, giant urticaria, lethargy, anorexia, numbness of the extremities, atropine effects, swelling of the gums, euphoria, depression and malaise.

Overdosage: The medication should be kept out of reach of children since accidental overdosage may cause severe, even fatal, respiratory depression.

Dosage: The recommended average initial daily dosages, given in divided doses until diarrhea is controlled, are as follows:

Children:

3-6 mo....½ tsp.* t.i.d. (3 mg.)
6-12 mo...½ tsp. q.i.d. (4 mg.)
1-2 yr.....½ tsp. 5 times daily (5 mg.)
2-5 yr.....1 tsp. t.i.d. (6 mg.)
5-8 yr.....1 tsp. q.i.d. (8 mg.)
8-12 yr....1 tsp. 5 times daily (10 mg.)
Adults:....2 tsp. 5 times daily (20 mg.)
or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

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Maintenance dosage may be as low as one-fourth the initial daily dosage.

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Any doctor in Alabama, even including MASA's non-members, can translate the statement, "It's a long way from Bedlam to Partlow." It means simply that we've made a lot of progress in the treatment of insane people since London's Hospital of Saint Mary of Bethlehem was first established some 700 years ago.

William Dempsey Partlow, M. D., born 4 February 1877, was nearly nine years older than his brother, Rufus Cornelius Partlow, who celebrated his 86th birthday last October 11th.

Born at Ashville, St. Clair County, their parents were Modena Catherine (Beeson) and David Alonzo Partlow, the latter a Confederate veteran. And both began their education in the public schools of Ashville.

The elder of the two brothers was valedictorian of his class when he was graduated with his M. D. degree from the medical department of the University of Alabama on 3 April 1901. He was a physician in the Bryce Hospital, Tuscaloosa, from his graduation to 1 October 1908 when he was appointed assistant superintendent of the hospital, a position he held until his election in 1919 to succeed Dr. James T. Searcy, becoming the third superintendent of the Alabama insane hospitals. He remained in this capacity until his retirement on 1 January 1950.

In addition to his work with the state hospitals, for which he was nationally recognized, Dr. Partlow was active in medical and psychiatric work in the state and nation. He served as chairman of the Alumni Committee and Medical Association Committee for the promotion of the Alabama Medical College. He was a member of the Physicians Advisory Board and chairman of the Building Committee of the Medical College of Alabama. Dr. Partlow is still referred to as the "father" of the University's Medical College in Birmingham, where his portrait now hangs.

Five children were born to the marriage of Dr. William Dempsey Partlow and Miss Margaret Cummings Nixon, daughter of the James Thomas Nixons of Birmingham: William Dempsey, Jr., Margaret Cummings

(Continued on Page 515)



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(Continued from Page 513)

(Mrs. Harry H. Pritchett), Nixon Beeson (who died in infancy), Kathleen Nixon (Mrs. Robert M. Peek, Jr.), and David Beeson Partlow. There are 17 grandchildren.

Carrying the many honors that an appreciative state and his fellow physicians heaped on him, Dr. Partlow died on 7 July 1953, midway of his 77th year.

His youngest son, David Beeson Partlow, was born 22 February 1921. With his baccalaureate from the University of Alabama in 1942, he went on first to the University of Alabama Medical School, and then to Tulane, from which he received his M. D. degree in 1947.

Dr. David Beeson Partlow, after interning and having his residency training at Charity Hospital, New Orleans, entered active OB-Gyn practice in his native Tuscaloosa, where he has remained since that time.

Married to the former Mary Beth Fischer, there are four children:—David, Jr., a premed senior at Vanderbilt and president of his SAE fraternity chapter; Margaret Nixon, a junior at the University of Alabama, and a Kappa Delta; Mary Beth, a senior at Tuscaloosa High; and Marlene, a 9th grader in Tuscaloosa Academy.

Dr. David Beeson Partlow is currently vice chairman and delegate, American College OB-Gyn; former president and vice president, Alabama Association OB-Gyn; a past president, J. Marion Sims OB-Gyn Society; past secretary, Tuscaloosa County Medical Society; a member of MASA, SMA, AMA, American Fertility Society, Tuscaloosa County Surgical Society, Southern Psychiatric Association (of which his father was the first president), Phi Chi medical fraternity, DKE social fraternity, and the Millwood and Marvella Hunting Clubs. He is an Episcopalian and lists his hobbies as golf, hunting and gardening.

The uncle of Dr. David Beeson Partlow, the younger brother of Dr. William Dempsey Partlow, is Dr. Rufus Cornelius Partlow, Sr., born in St. Clair County on Friday, 11 October 1885. Which a quick figuring with pencil and paper will show he will be 87 years old on his next birthday.

If there were such a thing, he would qualify this April for MASA's 60-Year-Club, for 1912 was the year he received his M. D. degree from the old Birmingham Medical College, subsequently absorbed into the University of Alabama.

A Methodist, young Rufus Partlow went to Baptist Howard College (now Samford) for his baccalaureate, and will inform you: "I didn't have a nickel a day to ride the street car across town." He played baseball with the Howard team, but probably didn't get the quarter a week for transportation, as that would have jeopardized his amateur standing!

Immediately after receiving his doctorate in medicine, young Partlow went to Bryce as an intern, serving under his brother, who then had the title of assistant superintendent. Subsequently each of the three state institutions for the insane—Bryce, Partlow and Searcy, at Mount Vernon—was under an assistant, with a superintendent presiding over all three. The younger brother's salary as an intern, he recalls, was $25 a month, payable quarterly.

He was transferred the following year, 1913, to Mount Vernon, where Dr. Emit Luther McCafferty, Sr., was in charge. It was a year before "June" (for junior) McCafferty, later to preside over the Medical Association of the State of Alabama as its president, was born.

In 1915, Dr. Partlow returned to Bryce Hospital as a resident physician, remaining there almost 29 years, or until 27 January 1944, when he became assistant superintendent of Partlow on the death of Dr. Leroy Woodruff. He remained here for 21 years, or until his retirement 1 July 1965, to round

(Continued on Page 518)

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Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

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(Continued from Page 515)

out 53 years in mental hospital work; this, of course, was except for a year's leave of absence in World War I, when he served his country as a first lieutenant in the Medical Corps.

In 1924 the now 38-year-old doctor was married to Miss Nancy Ervine Dominick of Greensboro, and two children were born to them: a daughter, Ilouise, who is today Mrs. William Inge Hill of Montgomery, and a son, Rufus Cornelius Partlow, Jr., born in Tuscaloosa 18 October 1930, the fourth subject of this article.

Going from the public schools of Tuscaloosa to the University for his baccalaureate, this youngest of the Partlow four took seven years more to determine on medicine as a career. The day after his graduation from Alabama at Tuscaloosa he was married to Theresa Mushat Ford of Birmingham, and went into business with his bride's father. The new Mrs. Partlow, incidentally, is a niece of the late Roland Mushat, whom many will remember as one of the chief advisers and close associates of the 41st Governor of Alabama, Benjamin Meek Miller.

The junior Partlows have two daughters, Cynthia, 18, a freshman at the University of Alabama, and Theresa, 13; and two sons, Rufus Cornelius Partlow III, 15, who is called "Neal," and Joseph Mann Partlow, seven. The junior Partlows now reside in historic Lexington, Massachusetts, where Dr. Partlow is presently practicing. He is a Diplomate of the American Board of Otolaryngology.

Meantime his father continues to maintain his home in Tuscaloosa, though the senior Mrs. Partlow has passed away. He used to fish, but now confines his hobbies to gardening and golf, spiced with an occasional visit to his daughter in Montgomery. A "southpaw" golfer, he shoots consistently in the low 90s and is proud of the fact that he has "played his age" more than once. And that is quite a feat for one who has reached a middle-aged 86!

But the Partlow story doesn't end there. The two senior Drs. Partlow had a sister, Mary, who was married in the early days of the century to Thomas David Moor of St. Clair County, near Ashville. A son born to them there, 9 February 1906, was named Ruble Eugene Moor. He went through the Birmingham public school system and on to the University of Alabama for his baccalaureate, followed by graduate work in 1929-1930. Four years later he received his M. D. degree from Tulane and promptly went into residencies at Touro in Pathology, Obstetrics and Gynecology.

Entering practice in New Orleans, he has been active ever since, on the faculty of Tulane's Department of Gynecology. He is a member of the Orleans Parish Medical Society, the Louisiana State Medical Society, AMA, a Life Member of SMA, Life Member of the New Orleans Gynecological and Obstetrical Society, a Fellow of the College of Surgeons, and a Fellow of American College of Obstetricians and Gynecologists. He is a past president of Southern Baptist Hospital and a past Chairman of the Executive Committee of Southern Baptist.

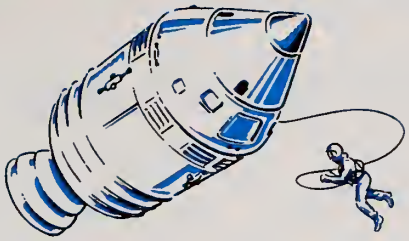
Dr. Moor is married to the former Marion Odenheimer and they have one son, who chose a profession other than medicine.

Court, Medicine and Malpractice

Reluctance of the courts in medical malpractice lawsuits to order a physical examination of the patient by a physician selected by the physician he is suing was discussed in an article in an insurance law journal. Even where such examinations are permitted, the author notes, the patient's attorney often seeks to impose unrealistic conditions on the examination itself.

The author . . . recommends legislation or court rules to insure uniform justice.

—Utah Medical Bulletin



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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Hobbies To Fill A Doctor's Leisure

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—Sir William Osler, 1909

Returned Medical Missionary Now Resurrects Old Cars

An Alabama doctor—whose driving absorption, even before he qualified with a degree to save lives, was to save souls—makes a hobby of rescuing ancient cars from the junk heap.

Five Fords, dating from 1917 to 1931, and a 1950 Packard are presently in his "stable," and their condition ranges from one "in pieces" to others ready to take the road for another season of life.

"May we never fail to see our responsibility to our fellowman," is the prayer of Paul W. Petcher, M. D., of Chatom, Alabama, italicized and quoted in the article announcing his choice by Bridgewater College of Virginia as its "Distinguished Alumnus of 1971."

He proved his sense of responsibility to his fellowman by nine years of service as a medical missionary to "darkest Africa."

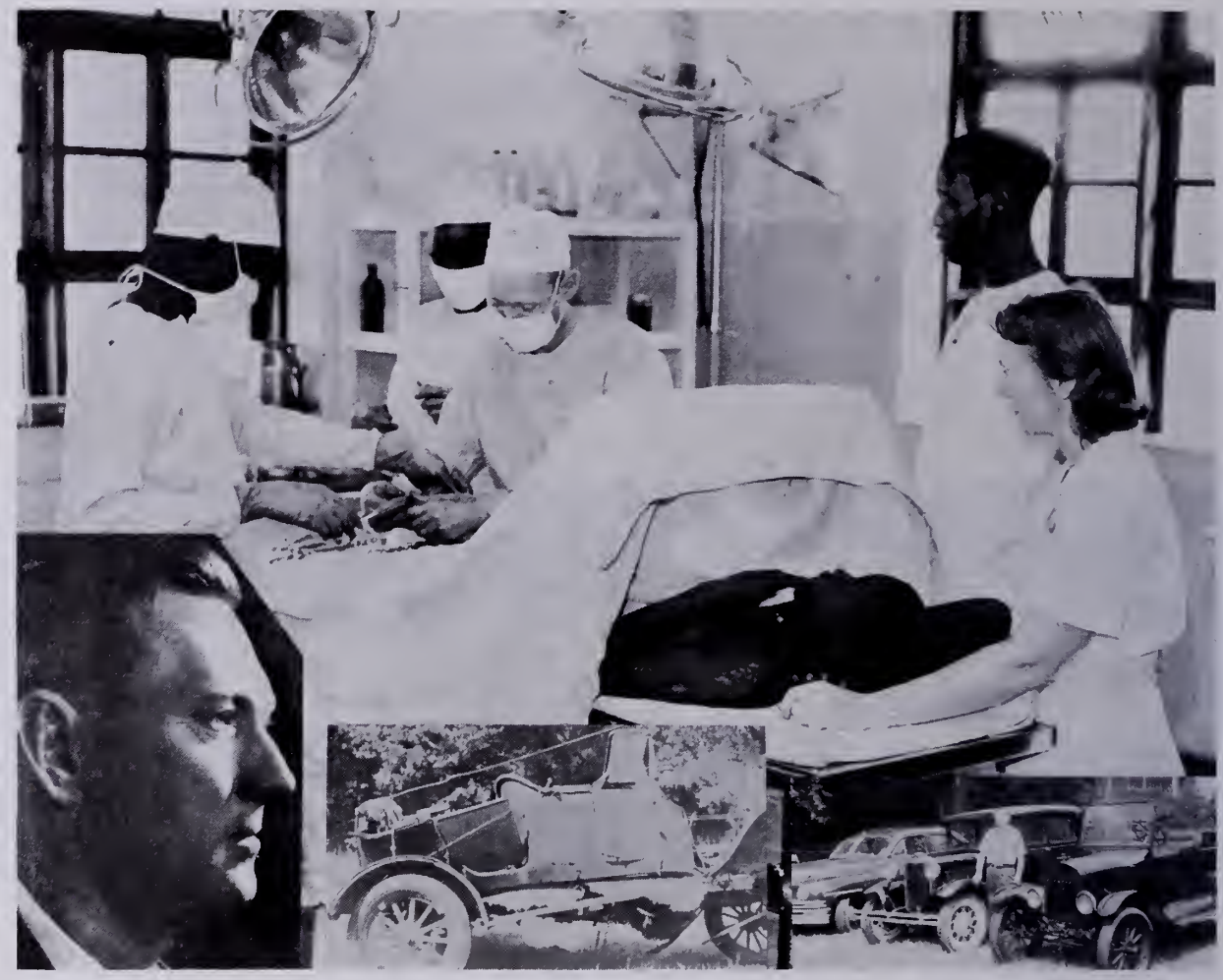
Paul Walter Petcher was born at Citronelle, Mobile County on Saturday, 15 July 1922, and attended school there through the 6th grade, when he moved with his family to Mobile, attending in turn Old Shell Road School, Barton Academy, and Murphy High, from which he was graduated in 1939. Four years later he earned his baccalaureate degree from Bridgewater. He received his M. D. from the University of Pennsylvania, interned at Jefferson Hillman, Birmingham, and had his surgical residency at Mobile General.

Going first to Nigeria in 1951, he was for three years in charge of a 70-bed general hospital at Garkida, and spent all his spare time working with patients in the Garkida Leprosarium. He was elder in charge of a number of Churches of the Brethren in Nigeria, and from 1956 to 1960 was the only medical doctor at the Lassa Hospital, Nigeria. This hospital served an area of more than 150,000 people with no other doctor in a 50-mile radius.

During this time, Dr. Petcher delivered about 250 babies a year and did 500 major operations annually, meanwhile treating more than 2,000 lepers as out-patients.

Paul Petcher was a 12-year-old grammar-grader when he heard the challenge destined to lead him through school to a medical degree and ultimately to service in the African jungles. Dr. Howard Bossler, a missionary doctor, called from a Mobile County pulpit on the congregation to produce a successor to him when he would some day have to vacate the Garkida Hospital in Nigeria. From that day to the day his dream was realized, Petcher stayed unwaveringly on the way pointed out to him by Dr. Bossler.

Having discharged one "responsibility to our fellowman" on the other side of the



Pictures of Paul W. Petcher, M. D.:—In surgery at Lassa Hospital, Nigeria, using a spinal anesthesia; with an array of three of his antique automobiles: a Packard, an A-model Ford, Dr. Petcher, and a T-model Ford, in that order; his 1917 T-model before he began work on it, a photograph he captions: "Labor Day—1966."

Equator and the world, Dr. Petcher returned to that part of Alabama from where he came, moving one county over from Mobile, to adjoining Washington, to become one of three doctors in Chatom, one of five in the entire county. He is today president of the Washington County Medical Society.

Married to the former Esther Mae Wilson, who was a Bridgewater junior in the year (1943) when he was graduating, they have four children: Cheryl, a 1970 graduate of Bridgewater; Richard, a sophomore general science major at Bridgewater; and Christine and Steven, at home.

Children were the primary reason the Petchers left Africa (they had to send Cheryl 500 miles away to school), just as the children subsequently became an influence in his No. 1 hobby. "One reason I've collected antique cars is so the children may learn to drive them."

One of his prized T-Model Fords had been chugging the highways for five years when Dr. Petcher was born, and 1917 was the year we entered World War I. Incidentally he was five years old when the other Model-T rolled off the Willow Run production line.

Two other very appropriate and quite logical hobbies spice Dr. Petcher's leisure hours that are not devoted to work on his old cars. Collecting Bibles is one and in his collection is a Bible printed in 1775, just when the smoldering fires of the restive American colonies were flaming into open combat and a successful rebellion.

(Continued on Page 525)



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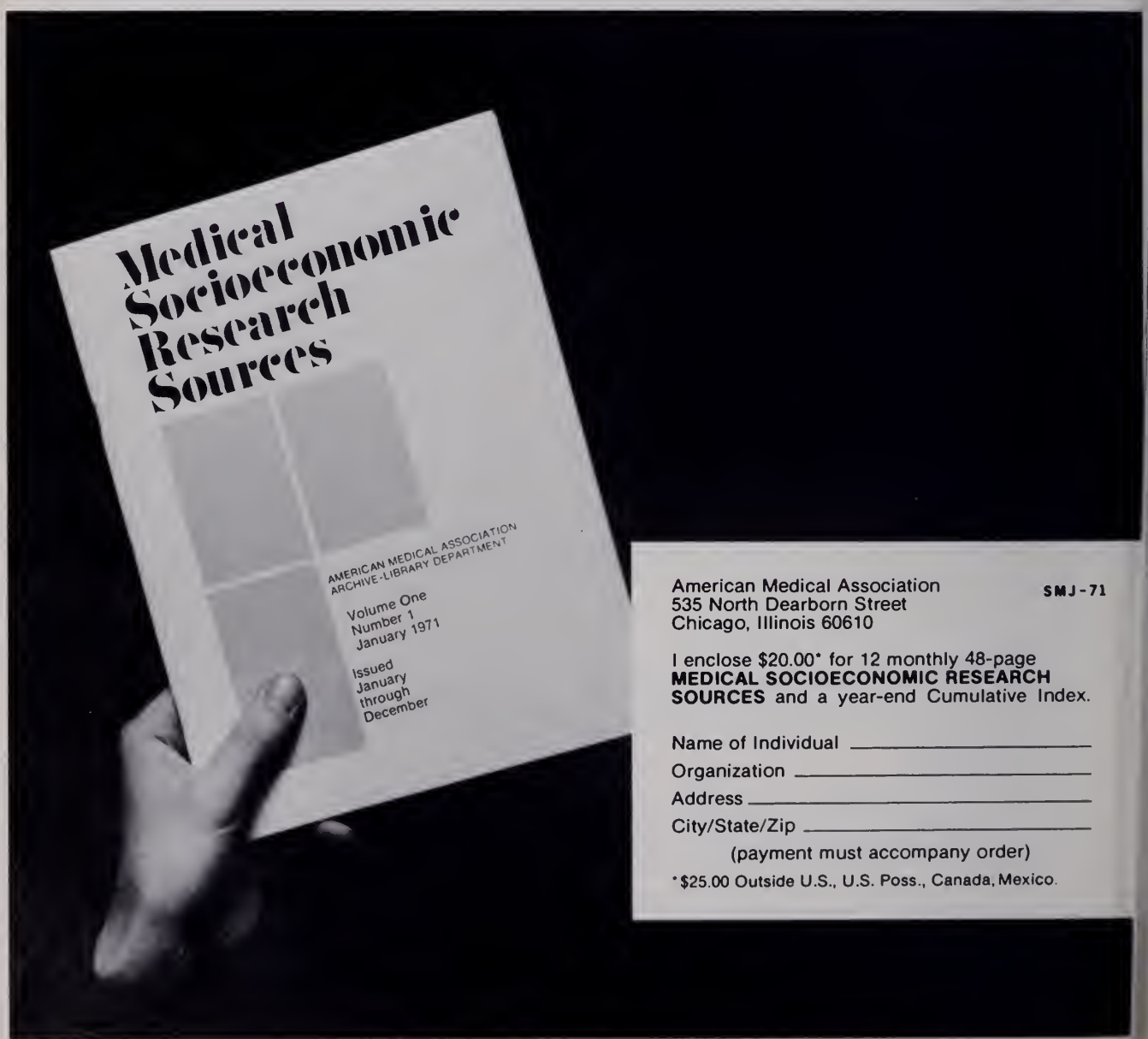
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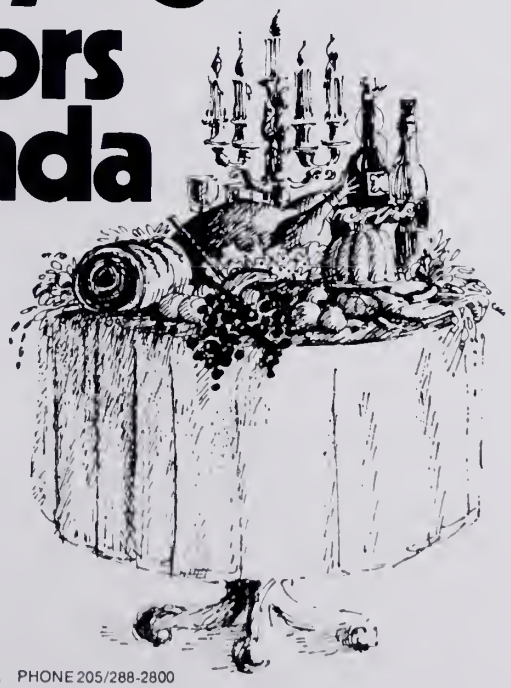
(Continued from Page 522)

For his other hobby, he is now learning to fly his own airplane. He grew up in the glamor era of American aviation. He was just two months shy of his fifth birthday when Charles A. Lindbergh flew the Atlantic alone. And the next year, Dec. 17th, was the 25th anniversary of the first successful airplane flight at Kitty Hawk, in North Carolina.

Hobbies, however, never interfere with Dr. Paul Petcher's professional, religious or civic responsibilities, as evidenced by the fact that he is currently president of the Washington County Medical Society, president of the staff of Washington Hospital, vice president of the Kiwanis Club, a member of the Washington County Pensions and Security Board, and on the Medical advisory board of the 6th District T. B. Hospital, Mobile. He was chairman of the Red Cross Blood Program in the Southeastern Region in 1968, currently serving on its advisory board. In 1967 he was moderator of the Tennessee district, Church of the Brethren, and is presently chairman of the Alabama parish committee, which helps correlate work of four Alabama churches.

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Electronic Communications Aid To Quadriplegic

By Joyce Murphree, Information Specialist
Alabama Department of Public Health

Alexander Graham Bell's 1876 invention is a brand new instrument to a Pike County quadriplegic. A convenience most of us take for granted, the telephone is a vital link with the outside world for the elderly, homebound man. Neither he nor his wife had ever used a telephone until recently, when they were introduced to electronic communications by a health service aide.

Mr. C. and his wife have multiple health problems which would overwhelm less courageous, less determined people. The 81-year-old Mr. C. has suffered from paralysis of all four limbs for 16 years. He is subject to frequent bladder and skin infections, and he also has poor vision. Mrs. C. has diabetes, arthritis, and other ailments. She is illiterate, and, in fact, cannot recognize numbers well enough to dial a telephone. The couple lives independently in their own home. It would be termed a modest home by most people, but they own the house, and they don't wish to leave.

Returning to Troy from a workshop in Birmingham, where telephones and other special equipment for handicapped people had been demonstrated, the Pike County Health Department health service aide exclaimed to Mrs. Lorraine Corley, public health nurse: "I'll bet Mr. C. could use one of those telephones!" A telephone would enable the elderly couple to consult the public health nurse or their physician when problems arose, and they could summon help in an emergency.

Enthusiastically, the aide began to make plans. Back at work, she fixed a small rubber ball to a pencil, as she had seen in the demonstration. Mr. C. might be able to grasp the ball well enough to dial a number. She called the telephone company and made arrangements for several different types of telephones to be sent to Mr. C.'s residence for trial. A pushbutton telephone was selected, and the aide taught Mr. C. how to dial the phone by punching the buttons with the pencil. When a call is to be made, Mrs. C. places the telephone on Mr. C.'s bed, puts the receiver to his ear, and he dials the number. Besides its use in an emergency, the telephone has provided much pleasure for Mr. and Mrs. C. They have talked to relatives in California and a 16-year-old grandson whom they have never seen.

Working together, the health service aide and the public health nurses in the Pike County Health Department have provided many services to Mr. and Mrs. C. through the home health services program. The public health nurse gives skilled nursing care, and the health service aide provides those services which do not require a nurse's skills.

Through a community effort both Mr. and Mrs. C. were fitted with glasses, enabling Mr. C. to read for the first time in years. A

(Continued on Page 528)

In 1818, during the first session of the House of Representatives of the Territorial Assembly of Alabama, a Representative from Monroe County petitioned for legislation placing control of the medical profession in the hands of physicians.

BLUE CROSS-BLUE SHIELD OF ALABAMA



(Continued from Page 526)

local woodworking shop cut a lapboard for his book or magazine to rest on, and Mrs. C. turns the pages. A porto-lift was obtained, and a neighbor was taught to use it. Mr. C. had not been out of bed for more than 12 years except to go to and from the hospital until the porto-lift was obtained.

Many benefits received by Mr. and Mrs. C. through home health services do not fall in the category of skilled nursing services. Yet they are definitely healthier and happier because of "unskilled" care, which illustrates the importance of the health service aide.

"The health service aide is an extension of nursing service which is finding favor with the physicians, nurses, and patients in home health agencies throughout the state," says Mrs. Anne M. Smith, director of the Bureau of Public Health Nursing, Alabama Department of Public Health. Over 7,000 home visits were made by health service aides between October, 1969, and September, 1971.

Persons eligible for Medicare and Medicaid benefits may receive visits from a health service aide if such visits are ordered by their physician and if the local home health agency provides this service. Sixty-four county health departments in Alabama are certified as home health agencies, and 31 of these have the health service aide as their second service. Under federal law certified home health agencies must have skilled nursing care as the primary service. The second service may be either physical therapy, speech therapy, occupational therapy, medical social work, or health service aides.

The health service aide's primary responsibility is to provide personal care services to home health agency patients. Her activities include bathing the patient, giving special skin care, carrying out basic rehabilitation procedures such as passive exercise and ambulation, preparing food for the patient, and feeding the patient. Personal care services which are to be provided a particular patient are selected by the public health nurse and carried out under the supervision of the public health nurse. The aide is also taught to recognize gross changes in the patient's condition and to report them to her supervisor.

By relieving the nurse of personal care responsibilities, the aide enables the nurse to use her professional skills more effectively, Mrs. Smith points out.

The health service aide is selected on the basis of her maturity, sincere desire to be of service to others, and ability to follow directions. Health service aides are trained by public health nurses in the local health departments. The aide is required to complete 120 hours of instruction during her first three months on the job. "Although formal classroom teaching is kept to a minimum in the training of a health service aide, she must be able to read and write and have a good common sense approach to health care," Mrs. Smith stressed.

Health officials are also finding that health service aides can assist in public health clinics, Mrs. Smith noted. They may assist the clinic nurse by taking temperatures, recording height and weight, and other similar tasks which can be performed at their level of preparation.

"We feel that health service aides can give even greater service than they have been called upon to provide," Mrs. Smith emphasizes. "This aspect of our home health services program has been under utilized. Teaching a paralyzed man to use a telephone may be a rare instance of a health service aide performing above the scope of duty, but all of our aides are providing valuable services every day. Many chronically ill persons are able to stay at home and still get the care they need. The patient is usually happier at home, and care is much less expensive than if the patient were in a hospital or nursing home."



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An all new homelike open psychiatric residence on a lovely five-acre tract, centrally located within the community, providing a comprehensive range of continuous services, including in-patient, day care, and outpatient treatment. Each patient participates in an extensive and intensive treatment program, based almost exclusively upon multiple psychotherapeutic encounters. These include individual psychotherapy, group psychotherapy, the nursing milieu, occupational therapy, recreational therapy, topical small group discussions, and other group activities in the Center, as well as in the community, depending on individual needs and interests. Medications are prescribed when appropriate.

Any individual may be admitted who, in the opinion of the medical staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible family member.

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14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures necessa for optimal control with insulin are also necessary with Orina The patient on Orinase must be fully instructed: about t nature of his disease; how to prevent and detect complicatio how to control his condition; not to neglect dietary restrictio develop a careless attitude or disregard instructions relative body weight, exercise, personal hygiene, and avoidance of fection; how to recognize and counteract impending hypo cemia; how and when to test for glycosuria and ketonuria; h to use insulin; and to report to the physician immediately if does not feel as well as usual.

Caution, very close observation, and careful adjustment dose are necessary when: insulin is withdrawn during the t period in order to avoid ketosis, acidosis, and coma; thiaz diuretics are administered which may result in aggravation diabetic state and increased tolbutamide requirement, tem rary loss of control, or even secondary failure; treating patie with impaired hepatic and/or renal function and debilitated, n nourished, or semistarved patients in order to avoid severe hy glycemia which may require corrective therapy over sev days; and treating patients with severe trauma, infection, or s gical procedures where temporary return to insulin or addit of insulin may be necessary. Response to tolbutamide is din ished in patients receiving therapy with beta blocking age

As some diabetics are not suitable candidates, it is esser that the physician familiarize himself with the indications, li of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, during the initial test period should communicate with the ph

Today you have your own.

If you're around 40 or 45, you've probably had quite a bit of clinical experience with Orinase.

Maybe as much as 14 years.

And that means you know quite a bit about it.

On the one hand, you know that diet and weight control are the initial and essential foundations for the management of adult-onset, non-ketotic diabetes. When these measures prove satisfactory, no additional therapy is indicated. On the other hand, you know that if these measures fail the addition of Orinase to the regimen can often help lower blood sugar. Orinase lowers blood sugar as effectively today as it did when you first prescribed it.

You also know the importance of close monitoring of the patient. Although uncommon, severe hypoglycemia may occur if the dosage is not tailored to suit his requirements.

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0.5 g. tablets

(tolbutamide, Upjohn)

...in daily, and during the first month report at least once weekly ...physical examination and definitive evaluation. After a month, ...aminations are recommended monthly or as indicated. Ap...arance of ketonuria, increase in glycosuria, unsatisfactory ...vering or persistent elevation of blood sugar, or failure to ...tain and hold clinical improvement indicate nonresponsive...ss to Orinase (tolbutamide). Orinase does not obviate need for ...intaining standard diet regulation. Uncooperative patients ...ould be considered unsuitable for therapy. Prescriptions should ...refilled only on specific instruction of physician. In treating ...ld asymptomatic diabetic patients with abnormal glucose ...erance, glucose tolerance tests should be obtained at three- ...six-month intervals. Orinase is not an oral insulin or a substi...e for insulin and must not be used as sole therapy in juvenile ...abetes or in diabetes complicated by acidosis or coma where ...ulin is indispensable.

If phenformin is prescribed in combination with Orinase, ap...opriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, ...y occur and may mimic acute neurologic disorders such as ...rebral thrombosis. Certain factors such as hepatic and renal ...sease, malnutrition, advanced age, alcohol ingestion, and ...renal and pituitary insufficiency may predispose to hypoglyc...mia and certain drugs such as insulin, phenformin, sulfona...des, oxyphenbutazone, salicylates, probenecid, monamine ...idase inhibitors, phenylbutazone, bishydroxycoumarin, and ...enyramidol may prolong or enhance the action of Orinase and ...crease risk of hypoglycemia. Orinase long-term therapy has ...en reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: *0.5 g. Tablets*—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

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David Arthur
D'Alessandro, M. D.
Fort Rucker



Henry Miles Faris, Jr.
M. D.
Fort Benning, Ga.



James Owen Moon
M. D.
Birmingham



Paul John Rodzewicz
M. D.
Birmingham



Steven Charles Herbert
M. D.
Birmingham



John Bell Hood
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Birmingham



Rodney Lee Stephens
M. D.
Fort Benning, Ga.



Calvin Richard Stewart
M. D.
Selma

(Continued on Page 535)

The girth control pill



Tepanil® Ten-tab®

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When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug, in emotionally unstable patients susceptible to drug abuse

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets (one 75 mg. tablet daily swallowed whole, in midmorning (10 a.m.). TEPANIL (one 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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Prescribing Information — Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** Quinamm is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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1-3508(3050)

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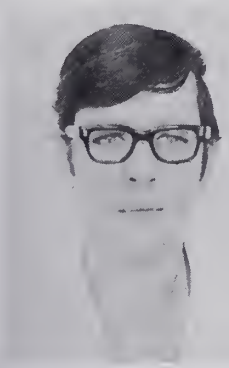
Quinamm

(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps.

NEW PHYSICIANS

(Continued from Page 532)



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M. D.
Redstone Arsenal



John Joseph Vecchio
M. D.
Opelika

1972 Continuing Education Courses Offered To MDs.

Continuing education courses being planned for the first part of 1972 are listed below. Most of these are co-sponsored by the division of continuing Medical Education of the University of Alabama School of Medicine. For additional information please contact: Dr. Margaret S. Klapper, University of Alabama School of Medicine, 1919 7th Avenue, South, Birmingham, Alabama 35233.

Progress in Obstetrics and Gynecology, February 10-11, 1972, (9th Floor Auditorium, Veterans Administration Hospital).

Alabama Chapter, Mayo Alumni Association, February 26, 1972.

ACP-ASIM (to be held at Point Clear), March 3-4, 1972.

Radioisotopes Training Course, March 6-10, 1972.

AAGP General Practice Reviews, April 3-7, 1972, (contact Dr. Harlan, Div. of Family Practice).

Internal Medicine Reviews, April thru June.



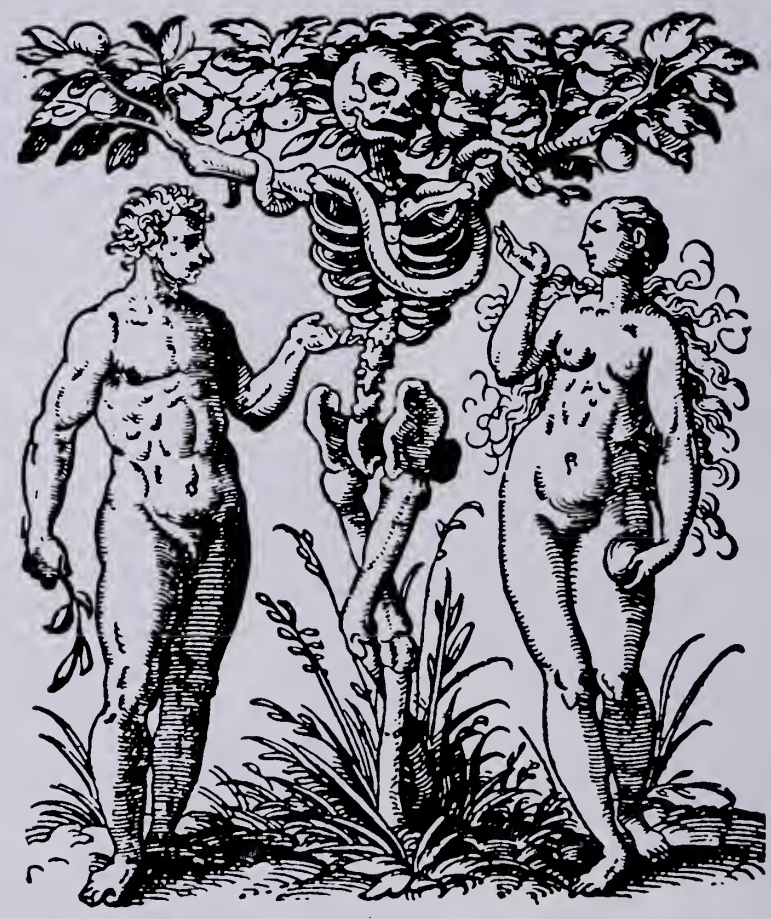
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In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®
(spectinamycin dihydrochloride pentahydrate)—For Intramuscular injectians, 2 gm vials cantaining 5 ml when reconstituted with diluent. 4 gm vials cantaining 10 ml when recanstituted with diluent.
An aminocyclitol antibiotic active *in vitro* against mast strains of *Neisseria ganarrhaeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. ganarrhaeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis ond proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhaeae*.

Contraindications: Cantraindicated in potients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully exomined and manthly serologicol follow-up for at least 3 months should be instituted if the diognosis of syphilis is suspected.

Safety for use in infonts, children and pregnant women has not been established.

Precautions: The usual precautions should be observed in atopic individuals. Clinical effectiveness shauld be monitored to detect evidence of development of resistance of *N. gonarrhoeae*.

Adverse reactions: The following reoctians were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever ond insomnio.
During multiple-dose subchronic tolerance studies in normal humon volunteers, the following were noted: a decrease in h

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single-dose intramuscular treatment

igh cure rate:* 96% of 571 males, 95% of 294 females
)osages, sites of infection, and criteria for diagnosis and cure are defined below.)**

ssurance of a single-dose, physician-controlled treatment schedule

o allergic reactions occurred in patients with an alleged history of penicillin sensitivity 'hen treated with Trobicin, although penicillin antibody studies were not performed

ctive against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

single two-gram injection produces peak serum concentrations averaging about)0 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

lote: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the mptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any fective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for onorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should e instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found ypersensitive to it.

ata compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-artin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-eatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the llow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined at reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or lures. These cases were regarded as non-evaluatable and were not included. JA72 1848-6

sbin, hematocrit and creatinine clearance; elevation of alka-e phosphatase, BUN and SGPT. In single and multiple-dose sdies in normal volunteers, a reduction in urine output was red. Extensive renal function studies demonstrated no con-sent changes indicative of renal toxicity.

sage and administration: Keep at 25°C and use within 2 hours after reconstitution with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dose (10 ml) intramuscularly.

w supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.
For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LWB)

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Deaths

BLOUNT, William James, M. D.—Dr. Blount, 89, who had been in general practice in his native Washington County for 61 years, died October 22, 1971, at his home in Millry, Alabama. Survivors include a daughter, Mrs. Ferber Wright, and a son, Robert J. Blount, both of Millry; a brother, M. M. Blount, Sr., Millry; two sisters, Mrs. Lee Coaker, Fruitdale; and Miss Grace Blount, Jackson, Ala.; nine grandchildren and four great-grandchildren. Dr. Blount's late wife was the former Elizabeth Moodie of Vinegar Bend, Ala. Born in Koenton, Ala., August 5, 1882, Dr. Blount was graduated from the University of Alabama Medical College in Mobile in 1910. Because of a great shortage of doctors in the Washington County area at that time, he bypassed an internship to begin general practice immediately, and had rounded out more than 61 years of active medicine at the time of his death.

* * *

BURKE, Daniel Wilbern, Jr., M. D.—Dr. Burke, 51, Mobile pediatrician, died suddenly on Nov. 29th, 1971. Survivors include his widow, the former Marie Louise Breaux of Church Point, Louisiana; three daughters, Mrs. Shawn Marie Connor, Tuscaloosa, Alabama; Barbara Lynne and Melissa Suzanne, Mobile; three sons, Daniel Wilbern Burke III, Gregory Alan and Richard Bradley, all of Mobile; and his mother, Mrs. Daniel W. Burke, Sr., also of Mobile. Funeral services were held from St. Ignatius Church with burial in the church cemetery mausoleum. A native of Mobile where he was born April 26, 1920, Dr. Burke completed his public school education there before going to Louisiana State University for his M. D. degree, received in 1944. He served in the Navy, 1945-46, most of the time in the Pacific, in Tokyo.

GOLDSTEIN, Ben, M. D.—Dr. Goldstein, 74, died Oct. 23rd, 1971. Survivors include a sister, Mrs. Louis G. Kopton of Birmingham. Dr. Goldstein was never married. Born in Birmingham on Nov. 1st, 1897, he attended the public schools there, earned his baccalaureate from the University of Alabama in 1918, his M. D. degree from Emory in Atlanta in 1922, interned at New York's Bellevue Hospital, and had practiced obstetrics and gynecology in his native Birmingham from 1926 to his retirement in 1965; for many years he was on the staff of St. Vincent's Hospital.

* * *

HILL, Robert Carl, M. D.—Dr. Hill, 77, died Oct. 13th, 1971, at his home in York, Alabama. Survivors include his widow, the former Emily McClinton, a foster son, Charles Hill Munoz, a music professor at the University of Southern Mississippi, Hattiesburg; and a sister, Mrs. John M. Tew, of York. Funeral and burial were in York, where Dr. Hill was born February 1, 1894. A Life Counsellor of the Medical Association of the State of Alabama, Dr. Hill had his baccalaureate from Auburn, a degree in pharmacy from Mobile's Medical College, and his M. D. from Tulane, in 1925. A founding member of the Alabama Academy of General Practice, a charter member of the Alabama Gynecological Society. Following a heart seizure Dr. Hill retired several years ago as head of the Hill Hospital, York, but later resumed limited practice. As a left-handed surgeon, a rarity in medical practice, he had been the subject of several magazine and newspaper articles.

* * *

MARTIN, Robert Lester, Jr., M. D.—Dr. Martin, 47, died Aug. 31st, 1971, at his home in Geneva, Alabama. Survivors include his widow, two daughters, Mary Ann and

Barbara; two sons, Robert L. Martin III and John; and three sisters, Mrs. John Susko of Ventura, Calif.; Mrs. Clara Smith, Alexandria, La.; and Mrs. Ada Hagler, of Louisville, Ala. Funeral and burial were held in Geneva, from the First United Methodist Church. Dr. Martin was born in Geneva on April 25th, 1924. World War II interrupted his education at the University of Alabama and he saw infantry service in the European Theater of Operations. Earning his M. D. degree from UAB in 1952, he went North for his internship before returning to his native Geneva to enter general practice and surgery. Aside from medicine, his interests centered in cattle-raising on his farm near Geneva.

* * *

RISER, Arthur Franklin, M. D.—Dr. Riser, 54, died Oct. 31st, 1971, at his home in Pell City, Alabama. Survivors include his widow, the former Anne Godfrey of Tuscaloosa; a son, Arthur, Jr.; two daughters, Miss Nell Riser, Nashville, Tenn.; Anne, Pell City high school student; a brother, George Riser, Huntsville; and two sisters, Mrs. Howard (Emma Frances) Weir, Jr., Birmingham; Mrs. C. E. (Mary Faye) Fuller, LaFayette. Dr. Riser, who was a member of the Board of Censors of St. Clair County, was born in Chambers County, Alabama, Aug. 15th, 1917. He obtained his baccalaureate from the University at Tuscaloosa, his M. D. from Emory in 1943, interned in surgery at the University of Pennsylvania, and had his residency at Carraway Methodist, Birmingham. He saw Army Medical Corps service from 1946 to 1948. Funeral and burial were held in Pell City where, at the time of his death, he was Chief of Staff of St. Clair County Hospital.

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AMA Policy

The American Medical Association has recently published a compilation of policy positions relating to the practice of medicine. The Journal will publish these policies each month as space permits.

It is suggested that physicians clip and file them for future reference.

CHIROPRACTIC

Chiropractic is an unscientific cult whose practitioners lack the training and background to diagnose and treat human disease. The delay of proper medical care caused by chiropractors and their opposition to the scientific advances of modern medicine often ends with tragic results. (Nov. 1966; reaffirmed June 1970)

The AMA urges state and local medical societies to adopt formally the above policy on chiropractic, "or a somewhat similar expression," and to alert the general public and their state legislators to the health hazard posed by the cult of chiropractic. (June 1968; June 1970)

The Association urges Congress to exclude chiropractic services from all federally-assisted health care programs. (Dec. 1970)

COMPREHENSIVE HEALTH PLANNING

The Association will continue to show an active, innovative and constructive interest in non-medical components of health services: education, housing, environmental control, transportation, civil rights and the alleviation of poverty. (June 1970)

The AMA will expand its active role in planning and developing programs for medical care and encourage and assist state and county medical societies to do the same. (June 1970)

The AMA, state and local medical societies will give diligent attention to the process of comprehensive health planning which, at present, places priority on local initiative and decision-making. The Association will at all levels try to assure a system of checks and balances so that state and area planning agencies are not given authority to subordinate local planning efforts and dictate local decisions on health planning. (June 1968)

Medical societies should encourage the organization of local health planning councils without the assistance of grants from the Dept. of HEW. (June 1968)

CYCLAMATES

"The risk associated with the use of cyclamates in limited quantities seems to be very small if, indeed, there is a risk." (JAMA editorial, Feb. 23, 1970)

The AMA's councils on Drugs, Foods and Nutrition, and Legislation will study the possibility of seeking the modification of present cyclamate regulations. (Dec. 1970)

DEATH, DEFINITION OF

The AMA endorses the Statement on Death adopted by the World Medical Assn. and known as the Declaration of Sydney:

"The point of death of the different cells and organs is not so important as the certainty that the process has become irrevers-

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ible by whatever techniques of resuscitation that may be employed. This determination will be based on clinical judgement supplemented if necessary by a number of diagnostic aids of which the electroencephalograph is currently the most helpful. However no single technological criterion is entirely satisfactory in the present state of medicine nor can any one technological procedure be substituted for the overall judgement of the physician.

If transplantation of an organ is involved the decision that death exists should be made by two or more physicians, and the physicians determining the moment of death should in no way be immediately concerned with the performance of the transplantation." (Aug. 1968)

The fact of death must be irreversible and must be demonstrated by adequate, current and acceptable scientific evidence. (Dec. 1968)

DISCIPLINE

The AMA supports existing mechanisms such as public grievance and adjudication committees, and utilization and peer review committees as most appropriate and effective for the consideration of fees and the costs of medical care. (June 1970)

The Board of Trustees is instructed to urge all state and local societies "to act swiftly and firmly in all instances of known exploitation and excessive charges for health care that may occur in their jurisdictions." (June 1968)

Medicine at all levels should maintain an active, aggressive and continuing interest in disciplinary matters, so that medicine will be permitted to continue to discipline its own members when necessary. The AMA may undertake disciplinary action when requested by a state association or when, at the request of the AMA, a state association to which a member belongs consents to such action. (June 1961)

See also Peer Review



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DISCRIMINATION

The AMA is unalterably opposed to the denial of membership in county and state associations to any duly licensed physician because of race, color, religion, ethnic affiliation, or national origin. It calls upon all state and component societies and upon all members of the AMA to exert every effort to end every instance in which such equal rights are denied. The Judicial Council is authorized to receive and act upon appeals filed by those who allege that they have been unfairly denied membership in a local and/or state society. (June 1964 and June 1966)

The Judicial Council is authorized "if it determines allegations (of discrimination) are indeed true, to admonish, censure or, in the event of repeated violations, recommend to the House of Delegates that the state association involved be declared to be no longer a constituent association" of the AMA. (Dec. 1968)

The Joint Liaison Committee of the AMA and the National Medical Association is working to advance recruitment of more Negro students for medicine and allied fields. (June 1968)

DRUG DEPENDENCE

The AMA urges that drug education be a continuing, important part of the health education curriculum. It encourages local medical societies to develop comprehensive community plans for drug education. (Dec. 1970)

The AMA supports legislation for control of the manufacture and distribution of barbiturates and amphetamines. (June 1970)

The Association stands unalterably opposed to the illicit or indiscriminate use of psychedelic drugs beyond use by physicians in carefully controlled experiments. (June 1966)

Physicians have a fundamental responsibility to treat narcotic addiction because it is recognized as a medical syndrome based on an underlying emotional disorder. (June 1963)

The indiscriminate administration of stimulants such as amphetamine and its derivatives is condemned as dangerous. (June 1957)

See also Drug Dependence-Marijuana and Methadone Maintenance

DRUG DEPENDENCE—MARIJUANA

1. Marijuana is a dangerous drug and as such is a public health concern. 2. Legalization of marijuana would create a serious abuse problem in the U. S. 3. Penalties for violations of the marijuana laws are often harsh and unrealistic. Legislators, law enforcement officials and the courts should differentiate the handling of the occasional user, the frequent user, the chronic user, the person sharing his drug with another and the dealer who sells for a profit. 4. Additional research should be encouraged. 5. Educational programs should be directed to all segments of the population. (Dec. 1969)

Medical treatment is indicated for persons who become seriously involved with the use of marijuana. (Council on Mental Health and Committee on Alcoholism and Drug Dependence, March 16, 1968)

DRUG DEPENDENCE—METHADONE MAINTENANCE

The AMA recommends that methadone maintenance programs include at least: (1) facilities to collect and test urine for the presence of drugs; (2) general medical, psychiatric and hospital services; (3) adequate staff and (4) rigid controls of dispensing methadone to prevent illicit sale or intravenous use. It urges that evaluation and research of the programs be continued.

The Association believes methadone maintenance is not feasible in the office practice of private physicians. The individual physician cannot provide all the services and controls required. Physicians should, however, cooperate with methadone maintenance programs in their communities and offer whatever services they may be capable of providing. (Council on Mental Health and Committee on Alcoholism and Drug Dependence, March 16, 1971)

DRUGS—ADVERSE REACTIONS

The AMA will increase its educational programs on drug usage and encourage Committees on Pharmacies and Therapeutics in each hospital to review drug reactions and to take appropriate control measures. The AMA will evaluate and disseminate such findings. (June 1970)

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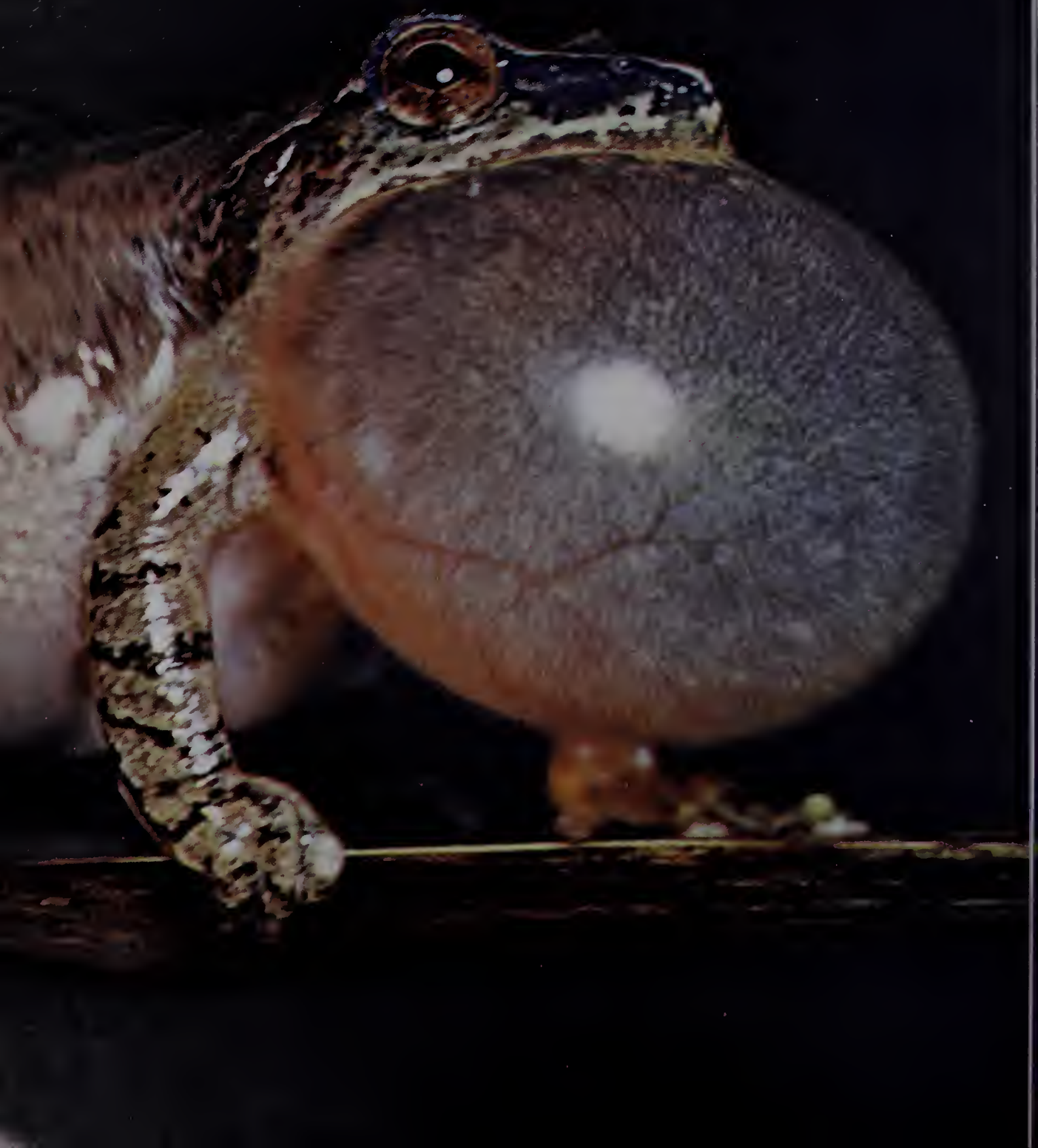
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New Orleans Graduate Medical Assembly

When The New Orleans Graduate Medical Assembly convenes again this year, it will be for their 35th annual meeting, to be held March 6-9, 1972 at The Fairmont Roosevelt Hotel. Twenty distinguished speakers, well known for their various specialties, have been selected to report on medical advancements in their areas. Medical motion pictures, round-table luncheons, a clinicopathologic conference and entertainment for wives will add interest to the program, and a special pre-meeting Symposium by Lederle Laboratories is planned for Sunday March 5th entitled "Our Polluted Environment—Its Problems for the Clinician."

This program is acceptable for twenty-two (22) prescribed hours and eight (8) elective hours by the American Academy of Family Physicians. For further information write to The New Orleans Graduate Medical Assembly, 1430 Tulane Ave., New Orleans, La. 70112.

They've been coming for 34 years . . .

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Fairmont Roosevelt Hotel

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H. Worth Boyce, Jr., M. D., Washington, D. C., *Gastroenterology*

J. Jerome Wildgen, M. D., Kalispell, Montana, *General Practice*

William A. Little, M. D., Miami, Fla., *Gynecology*

Sol Sherry, M. D., Philadelphia, Pa., *Internal Medicine*

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This program is acceptable for twenty-two (22) prescribed hours and eight (8) elective hours by The American Academy of Family Physicians.

All-inclusive Registration Fee $35. Send inquiries to: The New Orleans Graduate Medical Assembly, 1430 Tulane Avenue, New Orleans, La. 70112.

Read Before Posting

We never cease to be amazed at some of the things found in hospitals today. In the personnel office of a nearby well-known hospital an advertising poster on "Health Careers For People Who Care" was prominently displayed. Sponsored by The U S Department of Labor in its publication "Occupation Outlook Handbook" ($6.25), the poster sought to encourage persons to choose medical and paramedical careers. Its place in the hospital personnel office seemed appropriate. A long list of careers was outlined: physicians, dentists, medical lab assistants, speech pathologists, optometrists,

(Continued on Page 548)

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and physical therapists among others. Included on the list were chiropractors.

Chiropractors? Think of it! Is the U. S. Government now officially listing chiropractors as medical personnel? Hospitals, by displaying such information, imply at least tacit approval.

We assume that chiropractors are considered by the government to be orthopedic paramedical personnel. Perhaps the Department of Labor should consider some others. How about naturopaths as paramedical help for internists? Or mediums for psychiatrists? Or astrologists for hospital administrators?

We are not surprised by this example of another bureaucratic blunder by the federal government. Its prominent display in a hospital personnel office, however, cannot but injure the public image of medicine. Perhaps hospital administrators should read material before they post it.

—*Massachusetts Physician.*

'A Final Segregation'

Nearly all Alabama doctors, for one reason or another, will be interested in Ralph Nader's study-group report on nursing homes, just published under a Bantam Book imprint, and bearing the title: "Old Age: The Last Segregation." In 251 pages, indexed, the book is priced at $1.95.

The publishers hail it as "a call for an old people's liberation movement; graphic, documental revelations of what is happening to Americans over 65," and including "Questions to ask when visiting a nursing home."

Another Nader volume, issued by Bantam at the same time, is titled, "What to do with Your Bad Car," or "An Action Manual for Lemon Owners." This one carries two other bylines besides Nader's:—Lowell Dodge and Ralf Hotchkiss. In 254 pages it is priced at $1.50.—M.

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When I look back at some of my old records, I'm constantly reminded of the changes that have come about in medicine just during the past twenty-five years. Some of the diseases I treated and prayed over in the '40's are found mostly in medical history books now.

Thanks to drug research and development, we've made substantial gains in the control of cardiovascular disease, diabetes, malaria, mental illness, strep and staph infections, meningitis and a long list of ailments. It seems like only yesterday when a diagnosis of pneumonia was almost the kiss of death. Now, with modern medical techniques and drug therapy, we can offer some real help.

My records on polio, influenza and measles show an unbelievable trend for the better. New vaccines have reduced the toll of these age-old threats dramatically. And I see patients in pain from crippling arthritis helped with new medicinals unknown just a few years ago.

I hear questions about the three billion or so dollars spent by the drug industry in research during the past ten years . . . working on new and better drug products. It does seem like quite a bit of money to spend, and I realize some of it goes into dead ends. That's the problem with research, any research . . . you often don't know where you're going until you get there. I want all the tools I can get to help my patients. I want more drugs and more effective drugs. If they mean less pain, longer lives and more productive careers for those I treat . . . well, that's what really counts.

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Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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nd Efudex® (fluorouracil) 5% cream can resolve it.

ll it actinic, solar or senile keratoses, ny regard it as "precancerous."[1,2]

ical fluorouracil, considered by some dermatologists to be a major ance in the treatment of multiple solar keratoses,[3,4] offers the physi- a relatively inexpensive alternative to cryosurgery, electrodesic- on and cold knife surgery. Of the topical fluorouracils available, only dex offers 2% and 5% solution and 5% cream formulations—formula- s that have proved effective in the treatment of these mutliple lesions.

ual duration of therapy, 2 to 4 weeks.

dies showed that with the 2% and 5% Efudex preparations, the usual ation of therapy was only 2 to 4 weeks.[5] Other studies with topical rouracil revealed that when concentrations of less than 2% were l, significant numbers of lesions recurred.[6]

eats the lesions you can't see, too.

merous lesions, not apparent prior to 2% and 5% Efudex therapy, ifested themselves by definite reactions, while intervening skin ained relatively unaffected.[5] The early eradication of these subclini- esions (which may otherwise have undergone further progression) bably accounts for the reduced incidence of future solar keratoses in ents treated with topical fluorouracil—especially with 5% entrations.[6]

w to identify solar keratoses.

ically, the lesion—a flat or slightly elevated brown to red-brown ule—is dry, rough, adherent and sharply defined. Multiple lesions the rule.

edictable therapeutic response.

response to a typical course of Efudex therapy is usually racteristic and predictable. After 3 or 4 days of treatment, erythema ins to appear in the area of keratoses. This is followed by a moderate ntense inflammatory response, scaling and occasionally moderate derness or pain. The height of this response generally occurs two ks after the start of therapy and then begins to subside as treatment opped. Within two weeks of discontinuing medication, the ammation is usually gone. Lesions that do not respond should opsied.

rences: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, e & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T., and Honeycutt, W. M.: atment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *rmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, . 3. Belisario, J. C.: *Cutis*, *6*:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, *97*:14, 1968. ta on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and , E.: *Cancer*, *25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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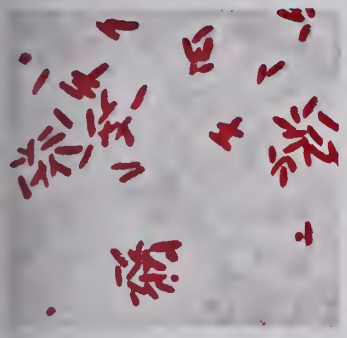
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of the

Medical Association of the State of Alabama

Volume 41 • February, 1972 • No. 8

Office of Publication
19 So. Jackson St. — Montgomery, Ala. 36104
Subscription Price — $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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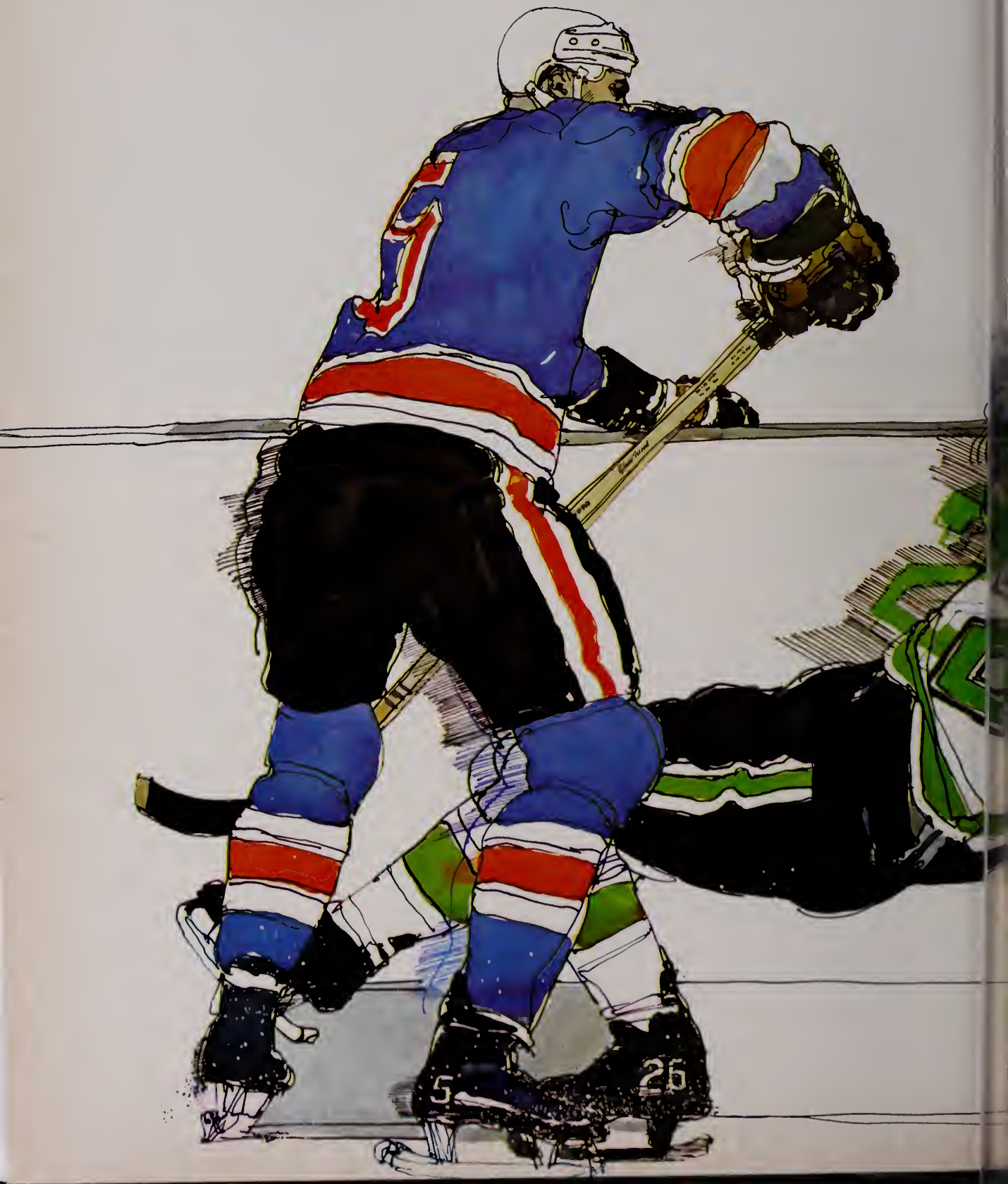
portant Note: This drug is not a simple analgesic. not administer casually. Carefully evaluate patients ore starting treatment and keep them under close ervision. Obtain a detailed history, and complete sical and laboratory examination (complete nogrem, urinalysis, etc.) before prescribing and at quent intervals thereafter. Carefully select patients, oiding those responsive to routine measures, con- ndicated patients or those who cannot be observed quently. Warn patients not to exceed recommended age. Short-term relief of severe symptoms with smallest possible dosage is the goal of therapy. sage should be taken with meals or a full glass of k. Patients should discontinue the drug and report mediately any sign of: fever, sore throat, oral ions (symptoms of blood dyscrasia); dyspepsia, gestric pain, symptoms of anemia, black or tarry ols or other evidence of intestinal ulceration or norrhage, skin reactions, significant weight gain or eme. A one-week trial period is adequate. Discon- ue in the absence of a favorable response. Restrict atment periods to one week in patients over sixty. *lications:* Acute gouty arthritis, rheumatoid arthritis, umatoid spondylitis.
ntreIndications: Children 14 years or less; senile lents; history or symptoms of G.I. inflammation or eretion including severe, recurrent or persistent spepsia; history or presence of drug allergy; blood scrasias; renal, hepatic or cardiac dysfunction; pertension; thyroid disease; systemic edema; matitis end selivary gland enlargement due to the g; polymyalgia rheumatice and temporal arteritis; tients receiving other potent chemotherapeutic ents, or long-term enticoegulant therapy.
rnings: Age, weight, dosage, duration of therepy, stence of concomitant diseases, and concurrent lent chemotherapy affect incidence of toxic reac- ns. Cerefully instruct and observe the individual tient, especially the aging (forty years end over) o have increased susceptibility to the toxicity of the g. Use lowest effective dosage. Weigh initially predicteble benefits against potentiel risk of severe, on fatel, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema heve been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of enkles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful deteiled history for diseese being treated end detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or en every two week blood check; pertinent leboretory studies. Ceution patients about participating in ectivity requiring elertness and coordination, es driving e cer, etc. Cases of leukemie have been reported in patients with e history of short- end long-term therapy. The mejority of these patients were over forty. Remember thet erthritic-type pains cen be the presenting symptom of leukemie.
Adverse Reactions: This is e potent drug; its misuse can lead to serious results. Revlew deteiled information before beginning therepy. Ulceretive esophagitis, acute end reactivated gastric and duodenel ulcer with perforetion end hemorrhege, ulceretion end perforation of lerge bowel, occult G.I. bleeding with anemie, gestritis, epigestric pain, hemetemesis, dyspepsie, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylectic shock, urticerie, arthralgia, fever, rashes (all allergic reections require prompt and permanent withdrawel of the drug), proteinuria, hematurie, oligurie, enuria, renel failure with azotemie, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renel cortical necrosis, renal stones, ureteral obstruction with uric ecid crystals due to uricosuric action of drug, impeired renal function, cardiac decompensetion, hypertension, pericerditis, diffuse interstitial myocerditis with muscle necrosis, perivascular granulomata, aggravation of temporel arteritis in patients with polymyalgie rheumatice, optic neuritis, blurred vision, retinel hemorrhege, toxic amblyopie, retinal detechment, heering loss, hyperglycemia, thyroid hyperplesie, toxic goiter association of hyperthyroidism and hypothyroidism (ceusel reletionship not established), agitetion, confusional states, lethargy; CNS reactions essociated with overdosege, including convulsions, euphorie, psychosis, depression, heedeches, hallucinetions, giddiness, vertigo, coma, hyperventiletion, insomnia; ulcerative stomatitis, selivery glend enlergement.
(B) 98-146-800-E

For complete detells, including dosage, please see full prescribing information.

GEIGY Phermeceuticels
Divlsion of CIBA-GEIGY Corporetion
Ardsley, New York 10502

TA-8356-9

WHAT'S THE PENALTY FOR BOARDING?





Two minutes in the penalty box for the offender and possibly months of painful skeletal muscle spasm for the victim.

For the skeletal muscle spasm of back sprains, Valium® (diazepam) can be a valuable adjunct. A dose of 2-10 mg, three or four times a day, goes to work to help break up the cycle of spasm/pain/spasm. The resultant relief of skeletal muscle spasm may permit greater mobilization of the affected muscles and may help the patient resume usual activities sooner than otherwise possible.



Paraspinal muscle mass frequently vulnerable to this type of trauma.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

VALIUM® (diazepam)

adjunct in skeletal muscle spasm

2-mg, 5-mg, 10-mg tablets

Ken Dallison



Trocinate®

BRAND THIPHENAMIL HCl

400 mg.

WILLIAM P. POYTHRESS & COMPANY, INC.

Manufacturers of Ethical Pharmaceuticals Since 1856

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President's Page



Archie E. Thomas, M. D.

The 111th Annual Session of the Medical Association of the State of Alabama is only weeks away and we, your officers, sincerely hope that you have already made your reservation.

Medicine needs your voice and presence more now than at any previous meeting. The pressure on your organization grows by the hour.

Unless you are willing to stand up and be counted, you will never recognize the type of medicine that you will be practicing three years from now.

Of course, many new approaches are being studied and there is a definite possibility that one of these will be presented for your approval at the Annual Session.

The point we would like to impress you with is that we need your presence, your enthusiasm and your guidance more today than at any time in the past. The profession you save might be your own.

Your officers have arranged a good program, composed of many outstanding speakers from different parts of the country.

We have changed the format somewhat: each subject will be discussed by at least two outstanding men from your profession. This will give much more participation and, I sincerely hope, more interest in the entire approach.

The Woman's Auxiliary has also arranged an excellent program for your wife. In addition to that, there will be good evening entertainment for both of you.

MASA headquarters will be at the Jefferson Davis Hotel. Auxiliary headquarters will be at the Whitley Hotel nearby. Make your reservations early.

You have more than a cordial invitation to attend the entire meeting.

The President of the AMA, Dr. Wesley Hall, as well as Dr. John B. Blalock are just two of the outstanding speakers who will be present.

We are anticipating a good meeting and good attendance, so please don't disappoint us.

Archie Thomas, M. D.

President

The Woman's Auxiliary

President, Mrs. Gilder L. Wideman
President-Elect, Mrs. George Hansberry
Northwest District Vice President, Mrs. Donald J. O'Brien
Northeast District Vice President, Mrs. Fred C. Ballard
Southeast District Vice President, Mrs. J. E. Dunn, Jr.
Southwest District Vice President, Mrs. J. Watson Maxwell
WAMASA Editor, Mrs. William L. Smith

AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

A Look Into The Future

A sure sign of maturity is the ability to plan ahead. The more mature a person, the more he anticipates the future. At first glance this may seem to be crystal ball gazing---but let's try it.

Each of us can be sure that in five years we'll be five years older (even if we don't admit it). The children at our house will be well along life's highway. Our baby will be in high school, we'll have three in college and one completed college—perhaps married. I could be a grandmother in 1977! I could also be a widow if my husband doesn't slow down, take an afternoon off occasionally and take a vacation.

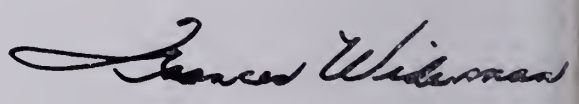
Our ten year old son cannot imagine five years hence. Five years is one-half his life time experiences. To each of us five years will pass too soon.

Knowing that no one and no thing stands still, what do you anticipate for your Auxiliary and for MASA? Will MASA speak for the physicians of Alabama in 1977? Will the Auxiliary be a strong arm of MASA? Will the public image of the doctor be great or not so great? Will we have socialized medicine?

Each of us has to ask these questions of himself. If you don't like your answers, ask yourself what you plan to do to make the answers you would like. My crystal ball tells me that if you do *nothing,* 1977 won't be a Happy New Year.



Mrs. Gilder L. Wideman



Frances Wideman
President



Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Upper respiratory congestion and hypersecretion associated with: the common cold; acute and chronic sinusitis, vasomotor rhinitis; allergic rhinitis (hay fever, "rose fever," etc.).

Contraindications: Hypersensitivity to any component; concurrent MAO inhibitor therapy; severe hypertension; bronchial asthma; coronary artery disease; stenosing peptic ulcer; pyloroduodenal or bladder neck obstruction. Children under 6.

Warnings: Advise vehicle or machine operators of possible drowsiness. Warn patients of possible additive effects with alcohol and other CNS depressants.

Usage in Pregnancy: In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur.

Effect on PBI Determination and I^{131} Uptake: Isopropamide iodide may alter PBI test results and will suppress I^{131} uptake. Substitute thyroid tests unaffected by exogenous iodides.

Precautions: Use cautiously in persons with cardiovascular disease, glaucoma, prostatic hypertrophy, hyperthyroidism.

Adverse Reactions: Drowsiness, excessive dryness of nose, throat or mouth; nervousness; or insomnia. Also, nausea, vomiting, epigastric distress, diarrhea, rash, dizziness, weakness, chest tightness, angina pain, abdominal pain, irritability, palpitation, headache, incoordination, tremor, dysuria, difficulty in urination, thrombocytopenia, leukopenia, convulsions, hypertension, hypotension, anorexia, constipation, visual disturbances, iodine toxicity (acne, parotitis).

Supplied: Bottles of 50 capsules.

SK&F *Smith Kline & French Laboratories*

Trademark

ORNADE® SPANSULE®

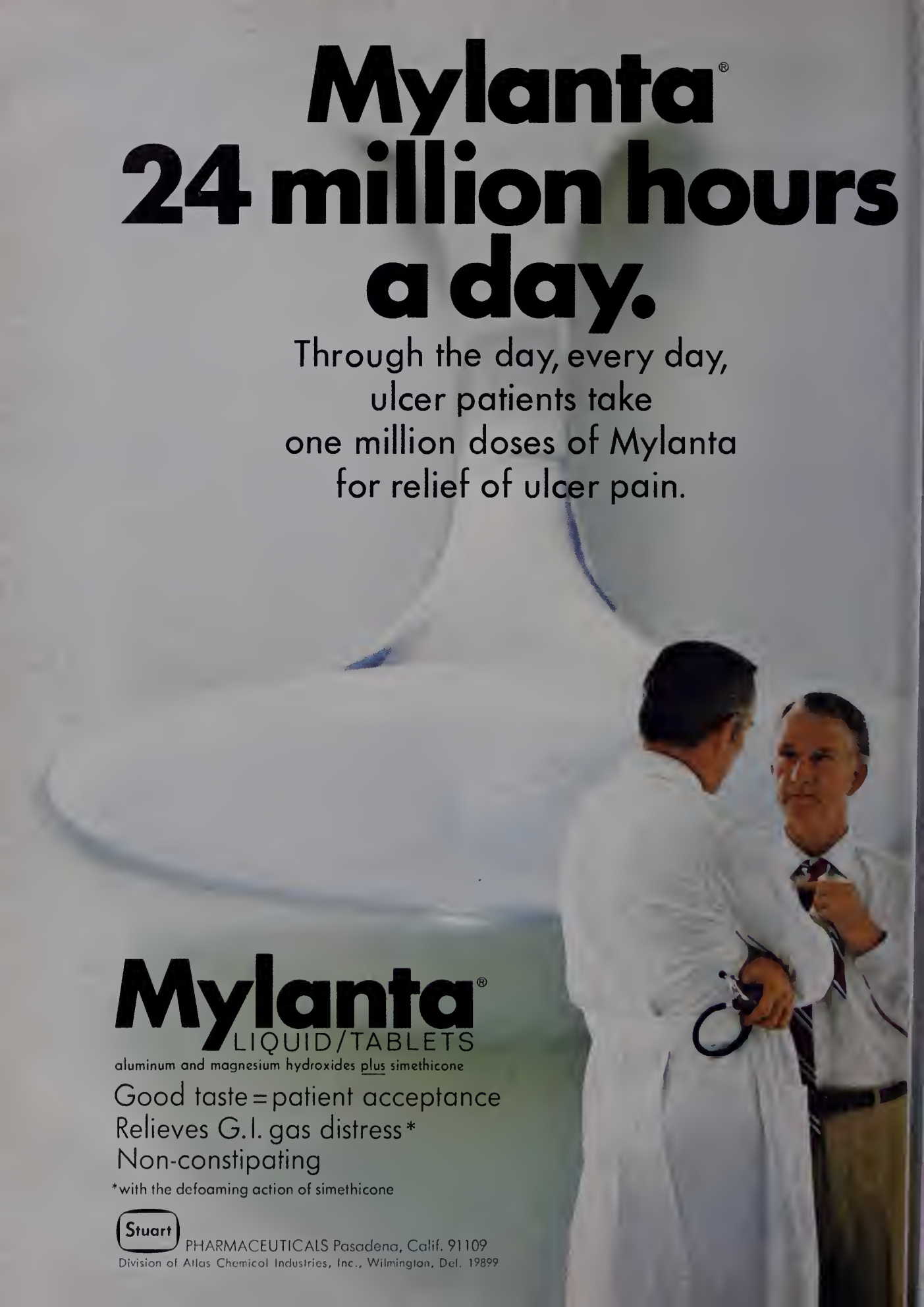
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Each capsule contains 8 mg. of Teldrin®(brand of chlorpheniramine maleate); 50 mg. of phenylpropanolamine hydrochloride; 2.5 mg. of isopropamide, as the iodide.

UNCOMMON RELIEF FOR COLD SYMPTOMS

Mylanta®
24 million hours a day.

Through the day, every day,
ulcer patients take
one million doses of Mylanta
for relief of ulcer pain.



Mylanta®
LIQUID/TABLETS
aluminum and magnesium hydroxides plus simethicone

Good taste = patient acceptance
Relieves G.I. gas distress*
Non-constipating

*with the defoaming action of simethicone

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An Apparent Boon To Womankind

It is coincidental that this issue of the Journal, detailing new techniques in the detection and treatment of cancer, is being prepared at a time when a news release is received from the Upjohn Company to announce the marketing of a new device designed to detect endometrial cancer.

The device was invented by L. Clark Gravlee, Jr., M. D., assistant professor of obstetrics and gynecology at University Hospital and Hillman Clinic, Birmingham.

Dr. Gravlee has previously described in this Journal his development of the jet washer technique.

In a paper published several years ago by Dr. Gravlee and two colleagues at the University of Alabama Medical Center, Doctors Edmund A. Dowling and Kelly E. Hutchins, it was written:

"Endometrial carcinoma is rarely diagnosed in the asymptomatic state and although it is a relatively slow-growing tumor overall survival rate is not commensurately good. It is obvious, therefore, that a precise method suitable for routine use on asymptomatic patients could greatly enhance survival.

"In this study of 1,500 symptomatic patients, the Gravlee Jet Washer was found to be a highly feasible method for use in detection of endometrial carcinoma. It has the advantage of negative pressure operation and there is no limit to the amount of irrigation that can be used. The overall accuracy of 93 per cent with this method in indicating the presence of endometrial cancer compares favorably with the best techniques of other workers.

"Positive endometrial washings in this series of patients corresponded well with histological diagnoses. Forty-four of 55 cases of adenocarcinoma had positive cytology while seven were inconclusive. There was one false negative and three unsatisfactory specimens.

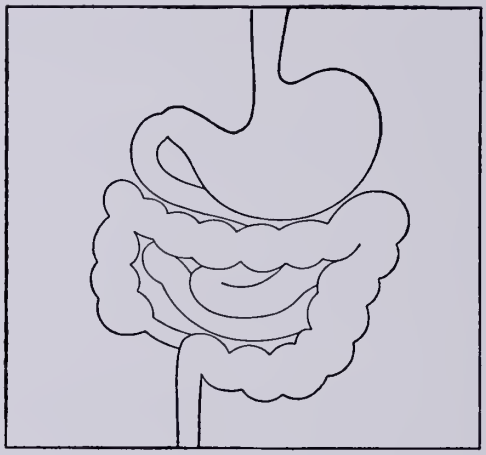
"Twenty-nine of the cases of endometrial cancer had previous vaginal and cervical smears. Ten of these (34 per cent) were positive.

"While most investigators report the mid 50's as the most frequent age for the occurrence of endometrial cancer the highest incidence in this series was the 60-70 years age group. Since the majority of patients in the series were in the 30-50 years age range (716 cases—47.32 per cent) the investigators said it is reasonable to assume that an increased overall yield of endometrial cancer may be brought about by better selection of patients."

The Journal salutes Dr. Gravlee and those who worked with him in developing this apparent boon to womankind. The magnitude of the service he has rendered is reflected in the fact that of 45 million women over 35 alive in the United States in 1970, it is estimated that 8,140,000 will develop uterine cancer, nearly half of them endometrial cancer.

(Continued on Page 565)

in "Gasspastic" conditions



The GI tract in spasm is commonly a "gas trap."

Sidonna® is formulated to release entrapped gas, as well as to provide antispasmodic/sedative effects.

In addition to the traditional combination of belladonna alkaloids and butabarbital (warning: may be habit forming.), Sidonna contains simethicone—a non-systemic defoaming agent that "lyses" gas bubbles on contact.

Sidonna has the ability to relieve GI spasm, pain **and gas** in the irritable bowel syndrome, spastic colon, pylorospasm, gastroenteritis, gastritis, nausea, nervous indigestion, or gastric and duodenal ulcer.

Sidonna can calm GI spasm...control anxiety...and release entrapped GI gas from the system.

Sidonna can do more for your "gasspastic" patient. Try him on 1 or 2 tablets before meals and at bedtime.

Sidonna®

Each scored tablet contains: Specially activated simethicone 25 mg.; hyoscyamine sulfate 0.1037 mg., atropine sulfate 0.0194 mg., hyoscine hydrobromide 0.0065 mg. (equivalent to belladonna alkaloids [as bases] 0.1049 mg.) and butabarbital sodium N.F. 16 mg. (Warning: May be habit forming.)

can do more

Contraindications: Anticholinergics should not be used in patients with glaucoma, known prostatic hypertrophy, or pyloric obstruction. Urinary retention may indicate the presence of prostatic hypertrophy. If it occurs, the dose should be reduced or the drug withdrawn. Also contraindicated in patients with known hypersensitivity to one of the components.
Side Effects: Dryness of the mouth, blurred vision, dysuria, skin rash, constipation or drowsiness may occur.

Reed & Carnrick/ Kenilworth, New Jersey 07033

(Continued from Page 563)

What Happens When The Patient Doubts?

The diabolical forces which seem determined to destroy Medicine's stature, for whatever purpose might be accomplished, would do well to pause and regard the potential results of their efforts.

That ultimate degree of confidence which patients must necessarily repose in their personal physicians is too essential to the healing process to be endangered in a wanton or reckless manner.

Any prolonged assault upon the medical profession, as a whole, must inevitably be reflected in a deteriorating regard for the individual physician. After all, medical organizations such as the American Medical Association are but the sum total of the dreams, aspirations, and frailties of their membership. The individual physician cannot long divorce himself from the vicissitudes visited upon his establishment.

In recent times we have seen the assaults upon the medical profession, in toto, intensified. It has been subjected to a steady barrage of criticism from the news media, organized labor, socialistic planners and divers other elements according to their own motives.

If the image of collective medicine is tarnished as Madison Avenue is wont to say, then how long can the image of individual physicians continue to shine?

But of paramount importance, what will be the fate of the sick and afflicted when their confidence in the integrity and reliability of their personal physicians is destroyed?

Can these libelous assaults upon the medical practitioner be long continued without destructive results to the physician-patient relationship?

No other profession in history has been so suddenly taxed with the burden of limitless government demands for total health care for everyone. The avalanche of patients, particularly from the elderly and indigent segments of our society, is unprecedented. It requires much less time to multiply the demand for physician services than will be required to train an adequate number of physicians to meet these demands.

There is no relief in the foreseeable future. The calumnies heaped upon physicians grow louder; the clamor for medical care grows stronger. But until expanding medical school facilities can begin providing the number of physicians and allied health personnel to fulfill the needs of the day there is no safe solution.

The Federal Government has further complicated the problem by designating the physicians as the arch villain in spiralling health care costs. It has singled him out among all other professions to freeze his fees. It has cast aspersions upon his integrity by decreeing that he publish and exhibit his fee schedules to any inquiring individual.

No other profession has been thus publicly branded in an economic situation created by no individual or group, and as much the fault of an extravagant government as from any other cause.

"Brew It Yourself"

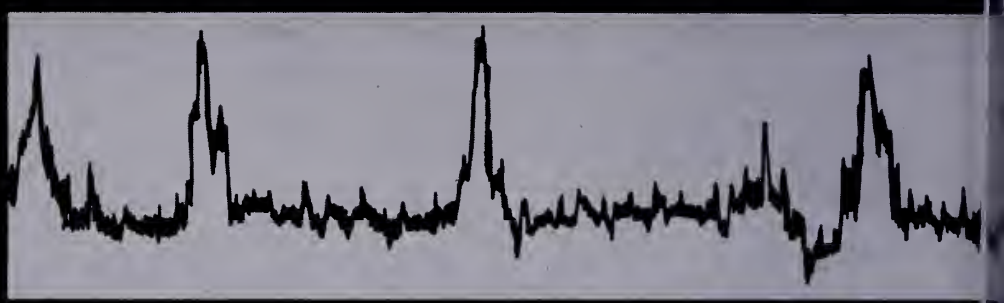
Take a little wine for thy stomach's sake, the Scriptures suggest. And many a doctor has prescribed beer as a restorative for emaciated patients. They have medicinal value.

So Leigh P. Beadle's "Brew It Yourself," a "complete guide to the brewing of beer, ale, mead and wine," an inexpensive paperback volume of 104 pages, will be read with interest by many, and put to the test by those inquisitive ones with the energy to try it. It's all perfectly legal, you know, so long as it's only for home consumption.

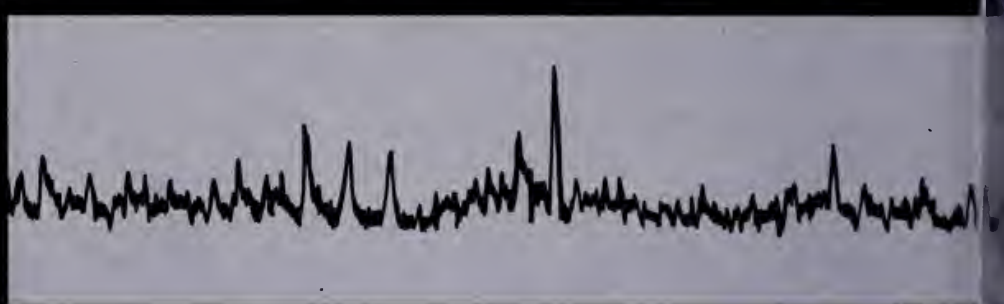
"Brew It Yourself" is published by The Noonday Press of New York, a subsidiary of Farrar, Straus and Giroux, priced at $1.25.

An intestinal autobiography of rage, contentment and horror*

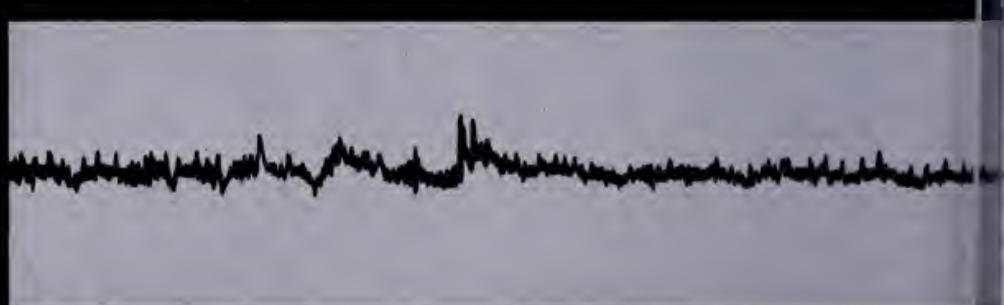
"Feeling unfairly taxed by the government (Internal Revenue Service) and not given enough attention by A.U.O. [an experimenter to whom the subject became very attached], he became overtly critical and accusatory. He shouted, raged, and threatened to quit."*



"The motility that day was quiet. This type of recording is seen regularly when he is relaxed and contented and the laboratory seems peaceful."*



He was overwhelmed by "paralyzing horror" when told he would need a partial laryngectomy for removal of an early carcinoma; "...the activity of the ileum virtually ceased for over a five-minute period...."*



Background

*Data presented here derive from a 13-year ongoing study by Henry Harrison Sadler, M.D., and Aline Underhill Orten, Ph.D., at Wayne State University. Their findings, which demonstrate a correlation between the emotional state of a human subject and the motility of an isolated segment of his ileum, were published in the April, 1968, *American Journal of Psychiatry*, volume 124, page 1375.

The subject is a 56-year-old man with a 40 Thiry loop of ileum created as a result of emergency surgery. A person of modest attainment and simple tastes, the subject depends on the investigators as he might own family. His full-time job is as a "huma laboratory," and throughout the 13-year p of the study, he has taken great personal in his own participation.

A story charged with emotion

The graphs on the facing page are intestinal motility readings on a human subject experiencing the emotions of rage, contentment and horror (see "Background" below left). This "intestinal autobiography" dramatizes the point that certain emotions correlate with specific patterns of G.I. motility.

The visceral clutch and functional G.I. disorders

The gut response to stress has been amply demonstrated in many functional G.I. disorders. Nervous diarrhea and irritable colon syndrome, for example, are disorders associated with abnormal G.I. motility. And these disorders are commonest among patients sensitive to life-stress situations productive of conflict and excessive anxiety.

Librax® calms anxiety, calms the gut

In these areas of G.I. pathology, Librax has become mainstay of adjunctive therapy. Reason? Effective two-way calming action. Librax, by relieving excessive anxiety, not only helps calm emotional overreaction to stress, it controls intestinal hypermotility, too. Depend on Librax—the only drug that combines the well-known antianxiety action of Librium® (chlordiazepoxide HCl) and the potent, dependable antisecretory/antispasmodic action of Quarzan® (clidinium Br).

1 or 2 capsules, 3 or 4 times daily in the treatment of nervous diarrhea and irritable colon syndrome

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances, syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

In functional G.I. disorders, adjunctive Librax®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

calms anxiety, calms the G.I. tract

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Hobbies To Fill A Doctor's Leisure

No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard.

—Sir William Osler, 1909

Picture Taking A Shared Enthusiasm For Six

Should something happen in the neighborhood of a Shades Valley Camera Club meeting and someone asked: "Is there a doctor in the house?" . . . he might get six answers to his inquiry!

For half a dozen prominent members of the Jefferson County Medical Society are also devotees of the picture-taking fraternity and on the roster of the 45-member club in an exclusive residential section of suburban Birmingham.

More than that, the inquirer for a doctor in the house would have a choice of specialties from Pathology to Pediatrics to Surgery, and including also a Dermatologist, an Ophthalmologist, and one confining his attention to diseases of the ear, nose and throat.

Two were born in the "Old World", one in Poland, one in Turkey.

To arrange them alphabetically:

Cemil Cezayirli, M. D., was born in the ancient capital of the Byzantine Empire, on the banks of the Bosporus in 1927, or just three years before the name of that historic city was changed officially from Constantinople to Istanbul.

Dr. Cezayirli (whose name is pronounced as though it were spelled Cezirily instead of the way it is) attended the schools of his native land and was graduated from the Medical College of the University of Istanbul with his M. D. degree in 1951. He served his two years of military service, 1952 and 1953, and



SIX PHYSICIANS CAMERA ENTHUSIASTS—Standing, from left: Dr. Cemil Cezayirli, Pathologist; Dr. Jeseph M. Dixon, Ophthalmologist; Dr. Frank Sims Moody, ALR; Dr. A. I. Perley, Dermatologist; seated: Dr. Sam P. Wainwright, Pediatrician; Dr. Harold E. Simon, Surgeon, the latter two retired . . . All members, Dr. Perley president of the Shades Valley Camera Club.

two years later moved to the Land of Promise; and to Birmingham five years ago.

There is another doctor in the family, who in lieu of the customary "Mrs." is Dr. Sevim Cezayirli, a neurologist. They are the parents of one son. The camera enthusiast pursues two other hobbies in his leisure hours: tennis and bridge.

If Joseph Moore Dixon enjoyed a less spectacular career up to and including medicine it was only because he was born in this coun-

try instead of some ancient foreign land. The son of a dentist, a native Virginian, he was born September 22, 1910 in Roanoke, that riverbank city lying between the Blue Ridge Mountains and the Alleghenies.

He was educated in the public schools of Roanoke, at Virginia Polytechnic Institute, and was graduated with his M. D. degree from the Medical College of Virginia in 1935, interning in that hospital the year following. His interests diverted to ophthalmology, he went to Washington University for Basic Sciences, had his residency at Cincinnati General, went with a fellowship in Eye Pathology to the Armed Forces Institute of Pathology, and a Heed Fellowship took him to Harvard, to Northwestern, and to Columbia.

A colorful time in his career gave him a year as ship's surgeon with the Grace Steamship Company, another year as staff psychiatrist with St. Albans Sanatorium, Radford, Va., and his military service ranged from officer-in-charge, Virginia Induction Center, to commanding officer, 97th Station Hospital and 2nd Convalescent Camp, India. He held the rank of lieutenant-colonel.

Dr. Dixon is a member of all the important medical and related societies, a past president of the Alabama Academy of Ophthalmology and Otolaryngology, a past president of the American Association of Ophthalmology, a past president of the Contact Lens Association, and is vice president of the Section Council of Ophthalmology, American Medical Association. He is the author and co-author of numerous scientific papers. And besides membership in the Shades Valley Camera Club, he is on the Board of Deacons of the Southside Baptist Church, and is a member of the Birmingham Country Club, The Club, Birmingham Sailing Club, and Birmingham Astronomy Club.

Married to the former Virginia Matthews of Roanoke, there are three children: Mrs. Mary Sale Doughton, Joseph M. Dixon, Jr., and Dr. John M. Dixon, who with his father will be the subject of a Fathers-and-Sons in Medicine article at some future date. In addition to private practice, Dr. Joseph M. Dixon is Assistant Professor of Ophthalmology at the University of Alabama Medical Center.

Third in the alphabetical list of Camera Club members is Frank Sims Moody, who attended grammar school, high school and college right in the town where he was born on November 6, 1914—Tuscaloosa. However, he transferred to Harvard for his studies in medicine, graduating with his M. D. degree from this Ivy League school in 1940.

Dr. Moody interned at Kings County Hospital, Brooklyn, but returned home to find a bride in the person of June Mathews of Sylacauga. The Moodys have two daughters, Elizabeth (Mrs. Eric Pedersen, who lives in Tokyo, where her husband is a shipping executive) and Louise (currently taking graduate work at the University of Guadalajara, Mexico).

Dr. Moody, whose professional specialty revolves around otology, laryngology and rhinology, developed his interest in photography at the early age of ten. His enthusiasm for this first hobby love has never abated though it must share some of its interest with boating and golf.

Which brings us to the second of this group born far across the sea. Abraham Israel Perley was born in Poland July 27, 1905, but came to the States at the age of 15, less than two years after the close of World War I.

In the adopted State of his parents, young Perley took his pre-med work at the University of Alabama, but transferred to Rush, in Chicago, for work toward his M. D. degree, graduating in 1935. He interned at Hillman, in Birmingham.

First entering general practice in Bibb County, he transferred to public health work and was for five years Chambers County Health Officer. It was here that he met and married Miss Anne Lavelle.

With the war, young Dr. Perley entered the service of his adopted country and

served for three years in the South Pacific, afterwards going to Massachusetts General Hospital for a residency in dermatology. He has been in the practice of his specialty in Birmingham ever since.

Travel runs photography a close second as a hobby, but he is also interested in "doing odd jobs around the house" and in reading, principally about the Middle East. That latter interest is reflected in numbers of Letters to the Editor of the Birmingham newspaper.

Incidentally, Dr. Perley is currently president of the Shades Valley Camera Club.

The two remaining physicians in this club share at least three facts-of-life. Both are retired, both this April will be inducted into the distinguished company of MASA's 50-Year Club, and both are travel enthusiasts.

Samuel Patrick Wainwright was born on Friday, September 23, 1898, in Escambia County, near the head of Perdido Bay, as his biographical sketch revealed in last December's issue of the Journal of the Medical Association of the State of Alabama. He attended the public schools of Atmore and went on to the University of Alabama for his pre-med work before entering Tulane, from which he was graduated with his M. D. degree in 1922. Afterwards he interned at Charity, New Orleans; served two years as assistant medical adviser at Cornell, Ithaca, New York; spent a residency at Bellevue, New York; and was for two years chief resident at Children's Hospital, Washington, D. C.

A Students at the Campus (SATC) veteran of World War I, Dr. Wainwright served in the Medical Corps in World War II, with the 68th General Hospital in England, attaining the rank of lieutenant colonel.

Mrs. Wainwright is the former Virginia Huss of Gastonia, North Carolina and they are the parents of three sons, the eldest, Samuel Huss Wainwright, is a civil engineer in Dothan.

A pediatrician, Dr. Wainwright was forced into semi-retirement several years ago by a misbehaving heart, and since that time he and Mrs. Wainwright have had to limit their shared liking for travel, and the physician has turned to less exacting hobbies: music, reading and, of course, photography. He is a member of the Pi Kappa Phi social fraternity, Theta Kappa Psi professional fraternity, a Mason, and an elder emeritus of the South Highlands Presbyterian Church of the U. S.

And finally, for the sixth of half a dozen Jefferson physicians with a shared enthusiasm for picture-taking, a November, 1970, Journal article on Hobbies began this way:

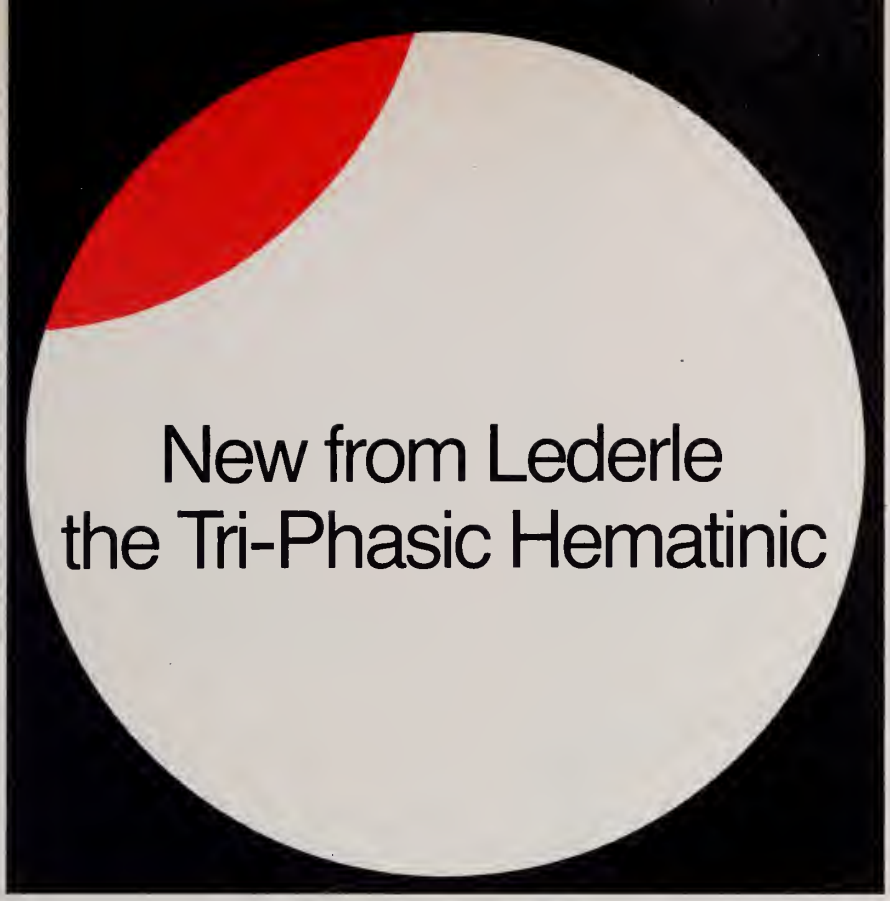
"A surgeon as skilled with a pen as with a scalpel, who has hunted big game around the world armed with a loaded camera, and who thanks a mild cardiovascular accident for the time to pursue his hobby, is this month's subject of 'Hobbies to Fill a Doctor's Leisure'."

The article goes on to say that Harold Ewart Simon, M. D., was born on Thursday, May 27, 1897, in Pennsylvania; that he received his M. D. degree from the University of Pittsburgh in 1922; that, with other degrees and residencies, he moved south to Birmingham in the year of the Great Depression, 1929; that he waited until he was 54 years old to marry; and that he and his bride of less than 20 years, the former Regina Pessemier of St. Marys, Kansas, have the leisure to devote to picture-taking in remote and exotic corners of the globe.

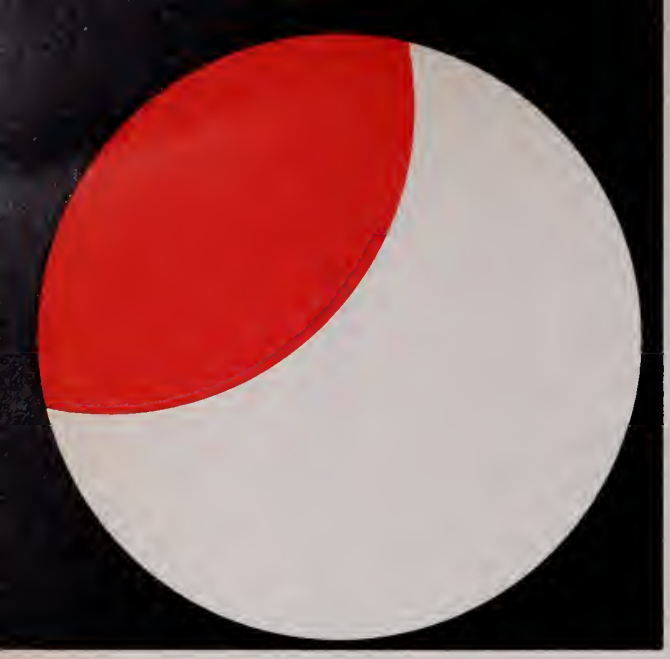
Those who keep their Journals of the Medical Association of the State of Alabama may turn back to their November, 1970 issue to see the array of pictures illustrating some of their travel-adventures with a camera. And since that time they have returned from a month's travel through Yugoslavia and Italy, including Sicily.

They took a six-mile jeep ride up Mt. Etna at midnight for pictures of the lava flow. What's more, they got them!

In 1957 Dr. Simon was president of the Jefferson County Medical Society, and in 1963 became a member of the Board of Directors of the Birmingham Museum of Art.



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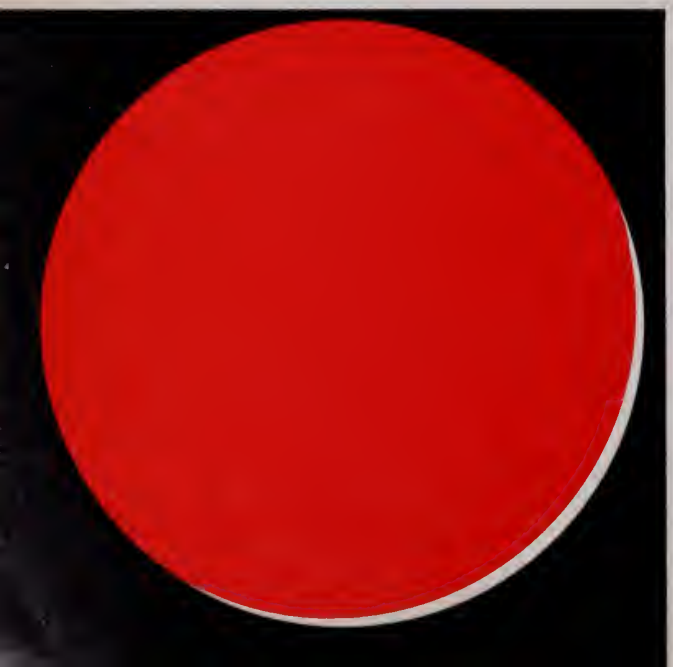
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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

Anesthesiology—

Age 36; University of Illinois, 1959; seeking group practice; Available December 24, 1971. LW-2/5

General Practice—

Age 49; University of Pittsburgh, 1951; seeking group or industrial practice. LW-3/1

Age 27; George Washington University 1969; National Board. LW-3/2

Internal Medicine—

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Age 31; University of Chicago, 1967; National Board; seeking group or associate practice; would prefer to work primarily as a general internist and part-time as an autopsy pathologist. Available July 1972. LW-13/7

Age 31; University of Kentucky, 1966; seeking group practice; Board eligible; Available July 1972. LW-4/11

Age 31; Ohio State, 1965; Board certified; seeking group practice; Available July, 1972. LW-4/12

Age 29; National University of Mexico, 1966; seeking group or institutional practice; Available July 15, 1972. LW-4/13

Obstetrics-Gynecology—

Age 49; Marquette University, 1945; Board certified; seeking institutional practice. LW-15/1

Ophthalmology—

Age 35; Louisiana State University, 1963; Board eligible, seeking group or associate practice. Available January 1972. LW-6/3

Age 30; Yale University School of Medicine, 1965; National Board; Board certified; Available April 1, 1972. LW-6/5

Age 31; Chicago Medical School, 1966; National Board; seeking associate or group practice; Available July, 1973. LW-6/6

Orthopedic Surgery—

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Age 31, Temple University, 1965; National Board; seeking group or associate practice. Available July 1972. LW-14/2

University of Illinois, 1965; National Board; seeking group or associate practice. Available July 1, 1972. LW-14/3

Otolaryngology—

Age 32; Temple University, 1965; National Board; Board eligible; seeking solo or group practice; Available August 1972. LW-16/1

Pathology—

Age 39; Ankara Medical School, Turkey, 1956; Board eligible; seeking associate practice. LW-8/2

Age 33; University of Texas, 1965; National Board; Board certified; seeking group or associate practice; Available September 1, 1972. LW-8/7

Age 31; University of Kansas Medical Center, 1965; Board certified; seeking solo, associate, or group practice; Available June 12, 1972. LW-8/8

Radiology—

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 31; Medical College of Georgia, 1966; National Board; Board certified; seeking group practice; Available August 1, 1972. LW-10/6

Age 31; University of Iowa, 1966; seeking assistant or associate practice; Available October 1, 1972. LW-10/8

Age 32; Louisiana State, 1966; Available September 1, 1972. LW-10/9

Surgery—

Age 33; University of Maryland, 1965; seeking solo, group, or associate practice; Available July 1973. LW-11/7

Age 33; University of Tennessee, 1967; seeking practice in General Surgery. Available July 1972. LW-11/8

Age 48; Duke University, 1947; National Board; Board certified; seeking group practice in general surgery; Available July 1, 1972. LW-11/9

Age 39; Creighton University School of Medicine, 1957; National Board; Board certified; seeking associate or group practice; Available June, 1972. LW-11/10

Age 40; Harvard, 1957; National Board; Board certified; seeking solo, associate, group or institutional practice. LW-11/11

Age 34; New York University School of Medicine, 1964; National Board; Board certified; seeking solo, associate, group or institutional practice; Available July 1, 1972. LW-11/12

Urology—

Age 34; Medical College of Georgia, 1967; seeking group or associate practice; Available July 1972. LW-12/1

Age 32; Tulane University School of Medicine, 1964; seeking solo, group, or associate practice; Available April 1972. LW-12/2

Age 31; Northwestern University, 1965; seeking associate or group practice; Available July 1, 1972. LW-12/3

Physicians Wanted

Special Openings—

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

Wanted, internists, generalists, radiologist, orthopedist, general surgeons, town of 15,000 population in county of 45,000 population in southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-17

Wanted: Immediately. Pediatrician to replace recently deceased partner in northeast Alabama. Enter busy practice in a predominantly GP area. Enjoy rural, quiet living with nearby scenic and recreational facilities. Salary, practice, everything negotiable. PW-19

Physician wanted. Student Health Service, University of Alabama. Eight full-time physicians. New facility. Competitive salary. Liberal vacation. Excellent fringe benefits. PW-20

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

(Continued on Page 598)

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 41 February, 1972 Number 8

INTRODUCTION

William A. Maddox, M. D., Chairman
Committee on Cancer
Alabama Regional Medical Program

The Cancer Committee of the Alabama Regional Medical Program is indeed fortunate that the *Journal of the Medical Association of the State of Alabama* has offered to publish the materials related to regional radiation tratement planning in this special issue. Since February 1968, this Committee has been very concerned about regional radiation treatment throughout the state and is, therefore, very pleased that this issue of the *Journal* is dedicated to the special articles related to improvement of radiation treatment.

The Committee sponsored a meeting which was held in Birmingham, October 8 and 9, 1971, in order to explore the region's further needs for radiation therapy. In order to stimulate better care of cancer patients, the group in attendance directed its attention specifically to better radiation treatment through a regional dosimetry project (ARMP Project No. 27).

The objectives were: 1) to involve radiologists, selected cancer surgeons, directors of schools of X-ray technology, and interested others to expand their knowledge of radiation treatment planning for cancer patients through the advice of selected consultants; 2) to provide an opportunity to further discuss the state-wide regional efforts for improved radiation treatment; 3) to develop a plan for implementation of strategies to improve the care of cancer patients; and 4) to provide an opportunity to share ideas.

The meeting was attended by Miss Hilda Regier of the *Medical World News* in order to report the meeting within that publication. Such a report was published at a later date.[1] Also included were representatives from the Arkansas Regional Medical Program.

Proceedings of the meeting were video taped by Mr. Robert J. Shaw of the Alabama Regional Medical Program (ARMP) and those ½ inch video tapes are available for review by any professional organization within the state if they have the playback equipment available. In addition, the major speeches were audio taped and the transcriptions of those tapes are the publications within this *Journal*.

In regard to radiation treatment, the purpose of this meeting was to introduce new concepts which are designed to improve the quality of cancer care for patients throughout a defined region and to evaluate the methods of delivering this new technology by also providing the basis for adequate financing of the system.

Mr. John Miller from Blue Cross-Blue Shield of Alabama did attend the meeting in order to explore the possibility of dosimetry planning being included in regular health insurance policies.

In 1970, the ARMP awarded a contract to COMPUTER-MED, INC. (ENVIRO-MED, INC.) of La Jolla, California, to develop a study of the needs of regional radiation planning in Alabama. The purpose of this

contract was to determine the need for a Regional Radiotherapy Treatment Planning Network in Alabama. If such a need were established, the system's analysis study would be accomplished with the primary goal being the establishment of criteria for such a system and its probable cost and overall operational concepts. Final report of the ENVIRO-MED study was submitted to the ARMP on June 15, 1971.[2] The report is available in the office of the Alabama Regional Medical Program.[3]

Implementation of the regional radiation dosimetry project of the ARMP remains the number one priority of the Cancer Committee. In late 1970, a project was approved by the Cancer Committee, other appropriate committees of the review cycle of the ARMP, and the Comprehensive Health Planning Agencies (a and b), and was then submitted to Washington for approval by the Regional Medical Programs Service. All Regional Medical Programs suffered a serious cut in funds during fiscal 1971 and, therefore, the state-wide plan could not be implemented in Alabama. In July, 1971, the ARMP Executive Committee voted to apply $26,000 of a special award of funds from Washington to be used for part of the dosimetry project indicated by the total amount of funding. The primary efforts to be supported by the $26,000 were related to education. This meeting held in Birmingham, October 8 and 9 was part of that educational effort.

Radiation treatment planning is also a concern of the Alabama Chapter of the American College of Surgeons, the Alabama Division of the American Cancer Society and the Alabama Radiologists Association. It is the hope of the Committee that many physicians in the state will read this issue of the *Journal*, and will submit to the Committee their reactions and ideas related to improvements of radiation treatment in the care of cancer patients.

Much credit for the success of the meeting goes to Robert Roth, M. D. and Mr. Tom McDougal of the Lurleen B. Wallace Cancer Hospital and Tumor Institute, and to members of the Cancer Committee. The major speakers for this meeting were: Robert J. Shalek, Ph. D., Department of Physics, M. D. Anderson Hospital, University of Texas; William S. MacComb, M. D., head and neck cancer surgeon, M. D. Anderson Hospital; Donn J. Brascho, M. D., Associate Professor, Therapeutic Radiology, University of Alabama School of Medicine, Birmingham; and David S. Herring, Ph. D., President, ENVIRO-MED. INC., La Jolla, California. These men are considered to be the most outstanding men in their fields and we were privileged to have had them present their scientific papers to the group, and are further privileged to present these papers to you.

1. Medical World News, November 5, 1971, p. 34.

2. Environmental Med Report No. CMI215, Regional Radiation Treatment.

3. Alabama Regional Medical Program, 1108 South 20th Street, Birmingham, Alabama 35205.

The Texas Regional Medical Program in Physics

Robert J. Shalek, Marilyn Stovall and Alfred R. Smith

Department of Physics
The University of Texas at Houston
M. D. Anderson Hospital and Tumor Institute
Houston, Texas

Before speaking of the medical physics program in Texas, I would like to define treatment planning and give a brief overview of the problems of delivering radiation treatment with apologies to those who are already familiar with radiotherapy.

Treatment planning means choosing those treatment parameters which will produce the optimum radiation distribution in a particular patient. In general, the optimum radiation distribution is that which delivers the highest, most uniform dose levels to the tumor and paths of tumor spread, while delivering as low a dose as possible to normal tissue, particularly those critical organs which are sensitive to radiation.

The radiation distribution is dependent on many factors; some of these can be controlled, some cannot. The complexity of the task is apparent if one looks at the parameters:

Parameters related to the patient which cannot be controlled:

(1) Size and location of tumor

(2) Size and location of critical organs sensitive to radiation, for example, eye, lung, spinal cord

(3) Location of body tissues which absorb radiation differentially, for example, bone, muscle, lung.

(4) Size and shape of patient.

Parameters which can be controlled:

(1) Mode of therapy

(a) Teletherapy, fixed beam or moving beam

(b) Brachytherapy, temporary or permanent

(2) Type of radiation

(a) Teletherapy:
X-rays, wide range
gamma-rays, Cobalt-60, Cesium-137
electrons
neutrons

(b) Brachytherapy
gamma-rays: radium, Cs-137, Co-60, Ir-192, Au-198, etc.
neutrons, Cf-252

(3) Geometry of radiation source(s); shape and placement of fields

(4) Beam-altering devices, such as wedge filters, compensators, secondary blocking

(5) Time.

It is the physicist's responsibility, by means of measurement and calculation, to describe the quantity and distribution of absorbed dose within the patient, as one or more of these parameters is varied. With this information, the radiotherapist can select the optimum treatment plan. In practice, the use of stylized treatments eliminates the need for detailed treatment planning for every patient. For example, at M. D. Anderson Hospital, for those patients treated by external beam, approximately 60 per cent of patients receive treatment planning by means of atlases of typical isodose curves or by use of standard tables of data. For the remaining 40 per cent a complete individual dose distribution is calculated; for many of these several alternate plans may be presented to the radiotherapist. A complete dose distribution is calculated for every brachytherapy treatment. Computers are used for all calculations for brachytherapy and the more complex arrangements of external beams.

In view of the complexities of treatment

planning it is my view that every facility where radiotherapy is administered should have the services of a medical physicist, either as a full-time staff member or as a consultant.

It is appropriate here to describe the activities of the Texas Regional Medical Physicists. This organization originated in 1968, with the support of the Regional Medical Program in Texas. Aspects of the program were supported for two years prior to this by the American College of Radiology by means of a grant from the National Cancer Institute. The purpose of the project was to provide a means for the medical physicists of Texas to communicate and cooperate with each other in order to extend and improve their services to the medical profession. By pooling their knowledge, experience, and manpower the quality of medical physics can be improved and the shortage of medical physicists can be relieved to some extent. Also, with the trend toward increased clinical collaboration of physicians from different locations, it is important that medical physicists perform to agreed standards. Thus, for instance, in radiation therapy the units of dose delivered in treatment must have the same meaning for all if there is to be professional consultation concerning patients.

At the present time there are 48 members of the Texas RMP; these include medical physicists working in hospitals, physicists on the State Board of Health and some graduate students, who are associate members.

The central office of the TRMP is maintained at The University of Texas M. D. Anderson Hospital and Tumor Institute. The office provides various services to individual physicists and avoids interference with established relationships between the physicist and physician. These services include:

(1) Calibration of ionization chambers

The TRMP office serves as an administrative agency for a regional calibration facility maintained by M. D. Anderson Hospital to assign ionization chamber correction factors for the measurement of ionizing radiation. An average of five correction factors are assigned each month.

(2) Mailed thermoluminescent dosimeters

To check the radiation output of therapy machines between regular calibrations, TRMP offers a method employing thermoluminescent dosimeters which are mailed to the physicist. The dosimeters are irradiated in defined geometry and returned to the office for reading; a report is then sent to the physicist. This method of checking may reveal incorrect chamber correction factors, incorrect machine calibration, or changes in measuring instruments or therapy machines. This service is particularly valuable to institutions which do not have a physicist on the staff; therapy machines in these situations may receive a full calibration only once a year, but checking by mailed dosimeters can be done frequently at small expense between calibration. An average of 12 therapy machines are checked each month by mailed TLD.

(3) Beam coincidence and uniformity checks

To verify the alignment of the light field and radiation field and to check the uniformity of the radiation field of therapy machines, TRMP provides a set of films which the physicist receives by mail, exposes, and returns to the center for processing. A report of the light field and radiation field alignment and radiation beam uniformity are sent to the physicist; approximately five such reports are issued each month.

(4) Dosimetry calculations by computer

For radiotherapy treatment planning TRMP offers centralized computer calculations for external beam, interstitial, and intracavitary therapy. Graphic or computer coded data concerning individual patients are transmitted to the central office by mail or by telecopier. The computer output is returned to the user by the same means. Dose distributions for approximately 70 patients

are calculated each month, as well as an average of two sets of isodose curves for atlases.

(5) Loan of equipment

Some equipment is too specialized or expensive for many institutions to purchase; TRMP has items of this nature which can be loaned to members for their use. These include a Victoreen R-meter, an Alderson anatomic phantom and a water phantom.

(6) On-site dosimetry reviews

A physicist at the TRMP center is available, at the request of a TRMP member, to visit to the local hospital and review all dosimetry techniques, including machine calibration, beam alignment, and individual dose distributions. A report is submitted to the member physicist. This is a new service of the TRMP, initiated in July 1971. Three institutions have had dosimetry reviews and 15 institutions have requested this service.

(7) Information services

The central office distributes monthly a bibliography of current literature concerning the physical aspects of diagnostic radiology, therapeutic radiology and nuclear medicine; copies of articles are available to members.

TRMP members meet twice a year for a scientific workshop and a business meeting. Also, communication between physicists and radiologists has improved by means of joint meetings with the Texas Radiological Society.

I would not suggest that all regions copy the TRMP in planning their physics support for a Regional Medical Program. In fact, each program will differ, depending largely upon the number of physicists in the region. The important point is that every radiotherapist should be provided with high-quality professional support in the field of medical physics.

"Cancer Surgery and Radiation Therapy"

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The use of surgical operation and radiation therapy as a planned approach for the treatment of cancer of the head and neck regions is relatively brief, in fact less than 20 years. Whereas each modality has held a predominant position at times in this field, it is now universally agreed that the proponents of each must work together to obtain the best for the individual patient.

In retrospect there is no doubt that in the early days surgical procedures were poorly conceived and carried out under what would now be considered the most adverse conditions. The operations themselves might have achieved better results if the patient had been better prepared medically and the scope of the procedure more limited. Anesthesia in those early days is certainly not to be compared to the present. Blood transfusions had not been developed. The value of tracheostomies both for anesthesia and the after care of the patient were not appreciated. Finally, surgeons in those early days had no aid in combating infections. Consequently, due to the high fatality and the poor survival and cure rate for head and neck cancer in general, the attempt at treating cancer by surgical procedure came to be regarded by many as a procedure of last resort, both by the patient and by the physician, to be undertaken only under the most pressing situations.

With the discovery of the potentialities of radium and roentgen rays in their application to cancer therapy in the 1920's and 1930's many believed the final answer had been acquired. Very soon the workers in the field found that more research would be necessary before radiation therapy could be safely utilized. Many of the patients

with head and neck cancer treated in those years received dosages too high and at too rapid a rate with consequent disastrous results, usually ending in hemorrhage and sudden death. Many surgeons interested in this field of cancer found that the pendulum had swung too far in the use of radiation. Therefore they again began to utilize the surgical approach.

At the conclusion of World War II the benefits from improvements of anesthesia and the uses of more blood transfusions, more careful medical preparation of the patient, and particularly with the availability of antibiotics, surgical operations conceived in previous decades now appeared to be feasible. Mortality rates were lowered. Survival rates increased. But again the pendulum was swinging too far in favor of these extensive surgical operations. Too often the extent of the surgical operation left the patient a permanent debilitized invalid unable to return to his occupation. At times the patient could not even appear in public, because of the disastrous cosmetic and functional results, particularly pertaining to the ingestion of food. Too frequently he had become a burden to himself and to his family.

Meanwhile, during the war years improvements had also occurred in the field of radiation therapy. More advanced knowledge and proper use as well as the limitation of the application of radiotherapy brought this discipline to an advanced level not before appreciated. With proper selection of the patients many tumors could be cured equally well with either modality for disease in the early stage.

The greatest advance in the treatment of head and neck cancer was reached when both radiation therapists and surgeons began to realize the possibilities for use of both these facilities in the treatment of advanced stages. This approach to a joint effort began some 20 years ago at the Curie Institute in France, by Wookey et al in Toronto, and, a little later, at the M. D. Anderson Hospital in Houston. Whereas in the beginning the use of one modality following the failure of the other only was employed, soon the possibilities for the planned use of both modalities became apparent. Radiation therapy following surgical operation was hampered in obtaining the most desirable effects since radiation of surgically scarred tissue had been proven to give indefinite benefits. On the other hand, surgical operations following radiation therapy was hazardous with possibilities, if not likelihood, of necrosis, exposure of vital arteries, hemorrhage and death.

Largely by trial and error it was found that preoperative irradiation therapy should not exceed 5500 rads tumor dose if these complications were to be avoided. In fact, 4500 rads gave better chances of ultimate control without these complications. By use of radiation therapy preoperatively the tumor could be reduced in size by as much as 50 per cent. Surgical operation later required removal of a lesser volume of tissue resulting in easier repair of the surgical defect and consequently better functional and cosmetic results.

Radiation therapy is now given at a rate of 1000 rads per week. The most effective time between completion of radiation therapy and surgical intervention has been found to be anywhere from four to eight weeks. This approach applies to primary tumors with or without cervical node metastasis. In most cases, however, radical neck dissection is considered advisable at the time of removal of the primary tumor, depending on the course, on the size, site, and stage of the primary. The treatment of each case should be individualized. No attempt should ever be made to use the so called "blanket rule." All patients are individuals and should be treated as such.

Experience has shown that if on admission of the patient, a course of radiation therapy, followed by surgical operation is planned, this prescribed course should be followed and not altered by unusual rapid decrease in size of the tumor mass. When at the completion of the prescribed course of radiation therapy (i.e. 5000 rads in five

weeks) examination shows what appears to be total regression of the tumor, the surgical operation should be carried out as originally planned. If the original plan is altered and the surgical procedure postponed or abandoned, the tumor will within six months in most instances recur. Surgical removal will then be more difficult and the best opportunity of control of the disease may well have been lost.

Use of preoperative irradiation for treatment of metastatic cervical nodes has still not been settled to the satisfaction of all concerned. Undoubtedly there is value in this combination but the most advantageous treatment dose and interval between the use of the two disciplines is still a moot point. There are too many variables: size, site, infiltration, the exfoliation of the tumor, the age and general condition of the patient.

To obtain an adequate answer to the question of the proper dose of preoperative radiation before a radical neck dissection is carried out is becoming increasingly more difficult. An answer can be obtained only by randomizing a series of patients, with lesions of similar sites and stages, of sufficient size to make the end results conclusive. In the present day, more and more cobalt therapy units are being installed around the country. Therefore fewer patients with head and neck cancer come to cancer centers, untreated. The answer would seem therefore to be a combination of effort by several cancer institutions under a central statistical authority. Only by such an approach can a definite answer ever be obtained for this critical problem.

Radiation Treatment Planning:

THE RADIOLOGIST POINT OF VIEW

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The increasing use of sources of high energy irradiation and special treatment techniques have allowed a greater confidence in the radiotherapeutic approach to cancer. The intent to cure with irradiation is much more prevalent than it was prior to the era of supervoltage equipment. This emphasis on cure has placed added responsibility upon the radiotherapist. He must keep abreast of improved techniques and have available an arsenal of very expensive and complex equipment. Ideally, he becomes an oncologist knowledgeable in the clinical manifestations of all types of cancer, skilled in techniques of physical examination, and equipped with a good basic background in methods of medical support.

Establishing Treatment Goals

The purpose of radiotherapy is to cure cancer or to palliate its accompanying physical disabilities or distress. Before the therapist can recommend the role that radiation should play in the management of the patient with malignancy, he must carefully consider many factors. These include the size and location of the primary tumor, local extension to surrounding structures, the presence of local or distant metastasis, cell type and differentiation, recent clinical course and general condition of the patient. This requires that the therapist is fully cognizant of the previous medical history and is knowledgeable of the current physical findings. Then, based on his knowledge and clinical experience, he must predict whether cure is possible. If achievement of this maximal goal seems unlikely, he must decide if ionizing radiation can help achieve the minimal goal—palliation.

Treatment Planning

Once a patient has been accepted for an

irradiation program and the goal of treatment established, the next important decision is the choice of mode of therapy. Superiority of supravoltage irradiation techniques over orthovoltage in treating most malignancies is now well established. Therapists have long been aware of the biologic and physical advantages of radiation in the 2-4 million volt range (supravoltage), over the 200-400 thousand volt range (orthovoltage). These advantages include less skin reaction, greater penetration and hence, better depth dose, better definition and uniformity of beam, less differential absorption in bone and soft tissue, and better toleration by the patient.

The cobalt 60 teletherapy unit has traditionally been the workhorse of most modern radiation therapy departments in the last decade. This unit is very efficient and reliable. Megavoltage machinery has now become available for clinical use. Linear accelerators and betatrons are sources of high energy X-ray beams in the 10-40 million electron volt range. The electron beam produced by the betatron can also be used to great advantage in certain clinical situations.

Because of the multiple sources and energy ranges now available to the therapist, and because of newer techniques of treatment, treatment planning has become very complex in most modern therapy departments. This planning not only involves the therapist, but the radiation physicist and dosimetrist. The radiation therapist utilizes information gained from physical examination, operative findings, and X-ray examinations to determine the extent and location of the malignant process. It is imperative that all of the disease be included in the irradiated area. Therefore, the most crucial step in planning treatment is the establishment of the anatomical area to be included in the radiation beam (portal). In many situations, it would be advisable to include tissues that, although not clinically involved, may have microscopic extension of tumor. This agressive approach is possible with supravoltage equipment. Not only are larger treatment areas tolerable, but higher and more effective doses can be achieved. Examples of this aggressive approach are the treatment of clinically uninvolved lymph nodes on one or both sides of the neck in certain primary tumors of the head and neck, the treatment of the mediastinal and left supraclavicular lymph nodes in seminoma of the testicle, and the use of large mantle ports in the treatment of Hodgkin's disease. In each instance, control rates have improved significantly with these techniques.

After the decision is reached as to what anatomic areas will be treated, a localizing radiograph is taken with the patient in the treatment position. Simulators are diagnostic X-ray units which allow these port films to be taken with the identical relationship that will be employed between the patient and actual therapy machine. Port films can also be taken with the therapy unit itself using special techniques or by use of a diagnostic X-ray unit. These latter techniques are not as satisfactory as utilization of a simulator. The resulting radiograph documents the tissues that will be exposed to the irradiation beam, and modifications are made until the area under exposure is suitable for the clinical problem. Simulators are a vital part of accurate treatment planning.

Modern techniques of external irradiation include the use of multiple ports, all directed at the tumor from different body surfaces, rotation of the treatment unit around the patient, and the use of wedge filters which alter the shape of the radiation beam. The use of these techniques requires exact and time-consuming planning. A cross-section drawing of the body contour is made at the level of the tumor and the location of the tumor and critical normal structures are recorded. From this drawing, the size, shape, and path of the most suitable treatment beams can be determined. Then, with the use of printed overlays of the absorption curves of each beam, the isodose distribution for the cross-section can be plotted by connecting points of equal per cent depth dose. From this isodose drawing, the amount of radiation reaching the points of interest can be calcu-

lated. The locations and angle at which the radiation beams intersect the surface of the body are transposed from the drawing to the patient for treatment.

Computerized Radiation Treatment Planning

A complex plan of radiation treatment may take several hours of planning using a slide rule or calculator. To speed up the handling of the physical and mathematical information, computers have assumed a very important role in the development of the treatment program. Optimized irradiation plans can be developed in a fraction of the time required by the manual technique. In addition, there is increased accuracy possible with the computerized treatment planning system. The computer display of the isodose distribution allows a more complete analysis of the radiation distribution throughout the treatment volume. Patient treatment can be improved by optimizing the program through rapid re-planning, if necessary. This allows for development of a more effective treatment plan, that is, one that deposits the maximum amount of radiation energy in the tumor volume with minimal absorption in surrounding normal tissues and organs.

There are two commercially available computer-based systems designed to help radiotherapists in planning the treatment of tumors with high energy irradiation. The Programmed Console (PC) radiotherapy planning system was originally developed at the Bio-Medical Computer Laboratory of the Washington University School of Medicine in St. Louis, and has been in use since 1965. The new PC-12 system was developed at Artronix Inc. of St. Louis, Missouri. Another commercially available system is the RAD-8, manufactured by the Digital Equipment Corporation. The general components of both systems are similar and consist primarily of a central computer, tape storage facility, an analog to digital (A/D) converter, a display oscilloscope, a teletype keyboard, a Rho-Theta tracer and an incremental plotter. The computer programs (software) needed to generate the outputs have been developed for external irradiation techniques. These programs are stored on protective system tapes.

In actual operation, the plan is visible to the user on the oscilloscope screen. Computer skills are not necessary to generate a plan. Programs conversationally interact with the user. The operator is guided in each step by instructions or requests for information on the oscilloscope and responds through the teletype. Initially, the outline of the patient is placed into the system. This is done by tracing over the contour drawing with the Rho-Theta pen. This contour is stored on tape and is then called for display on the oscilloscope by the operator. Beams are then quickly entered onto the oscilloscope by following instructions from the computer. The program guides rapid positioning of up to six beams on the display over the patient contour. Using simple interactive teletype commands, beams may be called in, removed, weighted, changed, and moved about on the display. Each beam is positioned on the screen by using the control knobs on the front of the oscilloscope. When the operator is satisfied with the outline-beam configuration, a teletype key is pressed and the computer calculates the radiation absorption throughout the patient outline. A rapid matrix summation is displayed in seconds, with corrections made for oblique entry.

When all the desired curves have been displayed, the operator has two choices. If the display is satisfactory he can request a plot of the results. This full-sized plot provides all treatment set-up and patient data for easy record keeping. If the plan is not satisfactory, a Replan is called and the most recent beam configuration reappears on the oscilloscope and again any of the beams can be removed and/or replaced. This repeatable process continues until the plan is completely satisfactory. Rarely are more than two or three modifications of the plan required and the entire operation generally requires less than five minutes. The results can be plotted immediately or stored on magnetic tape for later recall.

The high degree of accuracy potentially ob-

tainable with computerized treatment planning necessitates precise and accurate input into the computer system to yield the desired clinical result. To use a given computer program for dosimetry calculation, information is required on the contour or outline of the patient in the area of treatment and the location of the tumor. Ideally, this information should be measured rapidly, accurately, and in a form suitable for input into the computer.

Unfortunately, presently used methods for obtaining patient contours are not only time consuming, but relatively inaccurate. The most commonly used techinque is the shaping of solder lead wire around the curvature of the patient and then transposing this to graph paper. This technique is cumbersome and there is a chance of error because the wire is not rigid, and is easily distorted. Special mechanical jigs have been constructed which attempt to duplicate the patient's shape in two planes. Significant errors in plotting the actual patient contour may occur because of the mechanical nature of these techniques. As a result, the increased accuracy of computer computation may be negated by the error of input information.

Another potential source of error is tumor localization. Because of the lack of radiographic contrast between most abdominal malignancies and normal soft tissues, the exact size and location of deep tumors frequently cannot be determined. It is often necessary to make estimates of tumor location. This allows for further error in development of the treatment program.

Unless these two major weaknesses in accuracy of input information can be corrected, the high degree of accuracy obtainable with computers in the plotting of radiation isodose patterns throughout the treatment volume is not likely to reduce the overall error in treatment planning to a level which will significantly influence cure rates. If the advantages of computerized dosimetry are to be utilized to the fullest, more accurate input information regarding patient contour and tumor localization must be obtained.

The Utilization of Diagnostic Ultrasound In Treatment Planning

In an effort to improve the accuracy of irradiation therapy planning in the treatment of malignant disease, a project is now underway in the Radiation Therapy Department at the University of Alabama School of Medicine to implement a system of computerized irradiation treatment planning which utilizes ultrasonic laminography as a direct source of input information concerning patient contour and localization of tumors. The anatomical information that this examination provides will permit delivery of high energy irradiation more precisely to the malignant disease while sparing as much as possible the surrounding normal structures.

Clinical Experiences With Ultrasound

The ultrasonic laminograph has been used in the Radiation Therapy Department of the University of Alabama Medical Center for two and one half years. One-hundred-ten scans have been performed on patients with abdominal or pelvic tumors. These scans have been of great value in determining the location and size of deep tumors. The ultrasound study is used in addition to standard methods for appraising the limits of the malignant disease. The information is then utilized for the accurate placement of treatment ports on the body surface of the patient. The margin of the treatment field is checked with the ultrasound scanner to help determine if the entire tumor under treatment is encompassed in the radiation port. The scan allows accurate determination of the depth of the tumor beneath the skin surface and has been used in calculating radiation exposures. Furthermore, the scan has been helpful in locating normal structures. This has allowed the development of treatment programs which minimize the dose to sensitive and vital organs not involved with malignancy.

In addition to information about the deeper structures, the ultrasonic scan allows accurate recording of the patient contour. A single sweep of the transducer in either

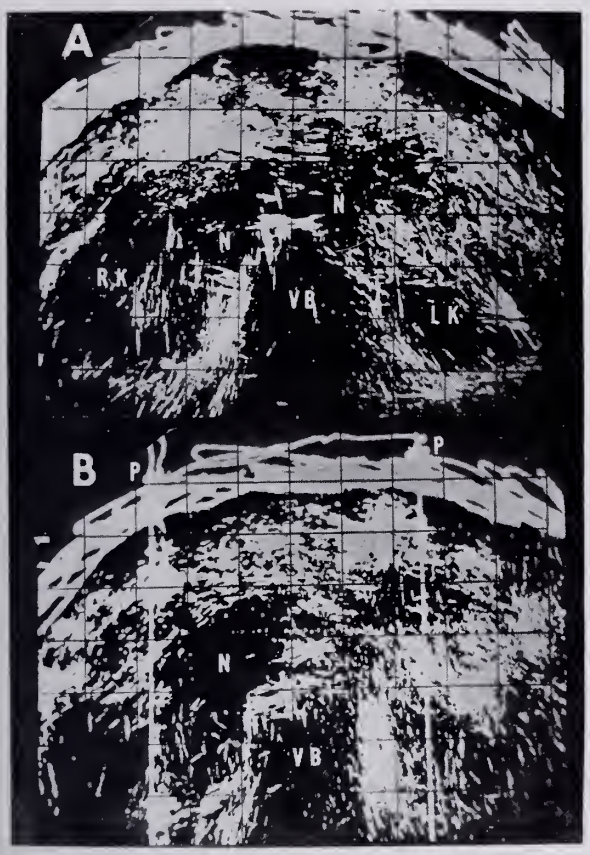


Photo 1. Transverse cross-section abdominal ultrasound scans at two levels showing multiple masses arising in the retroperitoneum in a patient with malignant lymphoma. The anterior abdominal wall is at the top of the scan. In A, two large groups of lymph nodes are outlined anterior to the vertebral body. Their relationship to the kidney can be seen. In B, the edge of the radiation ports are marked on the anterior abdominal wall skin surface (P), and the radiation field is outlined by the white line made by the scanner. A large group of lymph nodes is encompassed in the treatment area. (VB-vertebral body, RK-right kidney, LK-left kidney, N-lymph nodes).

transverse or sagittal planes provides a single line on the oscilloscope which is an accurate tracing of the contour of the body surface.

These experiences have indicated the practicality of utilizing ultrasonography routinely within the Radiation Therapy Department to aid in treatment planning. The ultrasonic scan provides accurate information about the patient contour and will demonstrate the relationship of the deeper structures of the body to this contour, both which are necessary for the development of the radiation therapy program. With the availability of computer programs for radiation treatment planning, it is logical and ideal to provide this highly accurate and rapidly obtained information directly into the computer.

Computer specialists have been consulted and indicate that the development of an interface between the ultrasound laminograph and the computer system is feasible. This interface will allow direct input of the image obtained by ultrasonic scanning into the central processor. The image of the scan will be displayed on the storage oscilloscope of the computer system. Recognition of images will be done by the operator. Undesirable echo patterns can be removed from the display. Areas of interest can be intensified on the screen by use of a light pen. A sharp outline of the margin of deeper structures can be made with this pen. The resulting image will be a single line contour with the deeper structures outlined within the contour. This is the basic information necessary to initiate treatment planning.

The Rationale For Increasing The Accuracy Of Radiation Treatment Planning

Mathematical models have been developed to evaluate the response of a tumor to radiation. Attempts have been made to calculate the probability for cure of a tumor as a function of radiation dose. By using these models, it has been shown that the probability of cure of the tumor is strongly dependent on the radiation dose. This indicates that small variations in the radiation dose have a considerable influence on the probability of cure. For example, if a given daily dose gives a probability for cure of 80 per cent and the radiation dose fraction is reduced by 10 per cent, it has been determined that the probability of cure decreases from 80 per cent to 26 per cent. Even slight errors in beam alignment or dose calculation could therefore account for failure of treatment.

In most clinical situations, the dose received by patients undergoing curative radiation therapy is very close to the tolerance dose for healthy tissue. The dose differential between the development of complications

and normal recovery is very small. Since both the probability of local control of tumor and normal tissue tolerance are strongly dependent on radiation dose, accurate dosimetry calculations and subsequent delivery of a known dose distribution is imperative. Optimal treatment planning is necessary to permit maximum cure rates as well as minimal complication rates. This requires that the skill and clinical judgment of the therapist be augmented by accurate and complete calculation of radiation dose distribution to the tissues. Computerized dose distribution calculations will lessen the chance of numerical error and the chance of missing a portion of the tumor volume due to misalignment of the radiation beams with the patient. Accurate input information regarding patient contour and localization of tumor volumes and normal organ structures is a basic requirement of the system.

It has been estimated that improving the accuracy of dosimetry to a level of approximately plus or minus five per cent would be potentially beneficial to one half or more of all patients treated with irradiation therapy. The goal of improving the accuracy of dosimetry to this level should be possible with these new techniques of radiation treatment planning. The benefits will not only be through higher cure rates, but through more effective palliation and a reduction of serious sequellae of radiation therapy.

The total number of lives saved and the amount of suffering prevented is impossible to determine, but potentially is significant enough to justify efforts to extend these services to all cancer patients receiving radiation therapy.

SUMMARY

The role of ionizing radiation in the treatment of many cancers is changing from one of palliation to cure. This is because of the development of more efficient treatment machines, refined technics, an increasing knowledge of radiation biology, physics and oncology, and in many instances, earlier diagnosis. As a result, the practice of radiation therapy, and in particular, treatment planning has become more complex. Computers and new methods of tumor localization will play a significant role in improved results of therapy.

Radiation Treatment and ARMP

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I welcome the opportunity to talk about the work that has been done jointly by our staff and that here in Alabama, in planning for a radiation therapy dosimetry system for the state of Alabama.

First, let me give a little history. Our company has been working with Dr. John Durant for about two years in helping develop the conceptual plans for the Lurleen B. Wallace Memorial Hospital and Tumor Institute. As a part of this work, Dr. Durant asked us to consider the interaction of the Memorial Hospital and Tumor Institute with the regional physicians, particularly those in the state who are concerned with the cancer problem. In time we developed a contract with the Alabama Regional Medical Program to study the problem in depth. What I have to say today is a result of this study done under the sponsorship of the Alabama Regional Medical Program. This study was completed in February of 1971 and the information presented in this talk is taken from the final report of the study.

In the early phases of this study, our staff worked with Dr. John Durant and Dr. John Packard to establish the goals of the study. The objective was to develop a dosimetry

system which would be a part of the total program of cancer management in the state of Alabama. The system should be responsive to the needs of the local communities, and it should be designed to encourage cooperation between the regional institutions affiliated with it. The system should provide a uniform dosimetry protocol for the state and standardized record keeping pertaining to patient treatment and follow-up. It should be designed so that its performance can be evaluated and improved if found to be deficient. The clinical services provided by the system should become fiscally self-supporting in a specified period of time. The system should include educational programs including the training of radiation therapy residents, physicists and others. In addition, the system should include programs for continuing education directed toward the practicing physicians and technical personnel. These programs should bring significant, new dosimetry information concerning techniques for the treatment of cancer patients to the radiation therapists and other physicians involved in treatment of patients on a daily basis.

Our first task was to make a survey of the radiation therapy programs in the state, to look at the radiation therapy manpower, facilities and equipment available, and to gather statistical data on radation therapy as it is practiced statewide. The next thing we did was to visit several RMP supported programs in different parts of the country. In particular, we visited the Texas Regional Medical Physics Program, a program which Dr. Shalek has already discussed with you. We also visited the Bi-State RMP where a radiation dosimetry system is functioning under the directorship of Dr. William Powers. We visited the Wisconsin RMP as well.

We studied these programs in some depth and concluded that none of these systems was transplantable to the state of Alabama for several reasons. The program about which Dr. Shalek spoke earlier comes closest to being transplantable, but he has the advantage of already having a fairly sophisticated physics community available in that state. In Alabama, at the time of the study, there was only one physicist involved in radiation therapy. The other systems were not acceptable as a model for Alabama because they were not designed and were not functioning, at that time, as a part of a total program of cancer management for the state.

In all but the Texas program, there was a serious lack of quality control. In many of the other programs, the therapist in the outlying areas had a telecopier through which to send his patient's contour and beam port configuration to the center. The physicist at the center would go over the contour, calculate a dosimetry plan and send it back to the therapist in the field. There was no assurance that the information used to calculate the plan was indeed accurate. The computer would, of course, calculate a precise dosimetry plan based on the information put into it, but if the input information was inaccurate, the dosimetry plan was not accurate. In addition, there was no way to see that the treatment was delivered accurately once the plan was sent back to the therapist in the outlying area. Further, all of these programs appeared to be in serious financial trouble. Government support was giving out. No means had been set up so that they would become fiscally self-supporting. Therefore, we decided to have a fresh look at the problem and to devise a system which would be geared specifically to the needs of Alabama.

The first step that we took in the planning effort was to think about a cancer management program for the entire state. We wanted to do this because unless we went through the exercise of looking at what is involved in a total cancer management program we could not be sure that the dosimetry system requirements would be complete. We concentrated first on examining what a cancer management program for the entire state might be. Time does not permit me to go into this in detail, and it is not necessary. However, I do want to say a word about it because I think it places things in perspective. There are remarks which I will

make later on which will need this background.

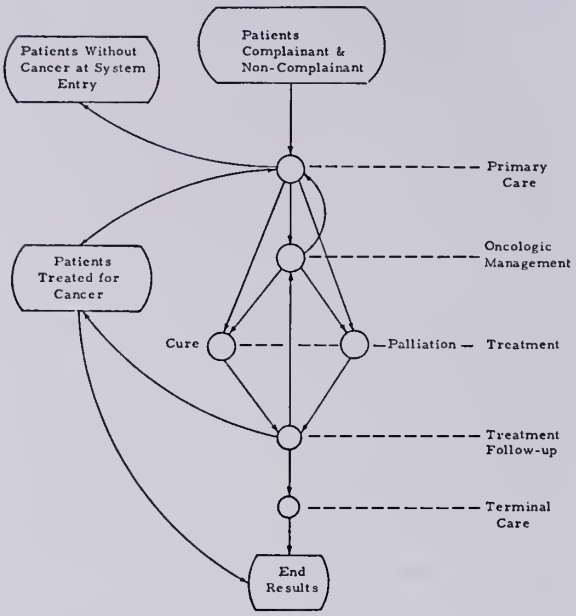


FIGURE 1
Schematic Illustration of Patient Tracks
Through the Model Cancer Care Delivery System

FIGURE 1 is a schematic illustration indicating some of our thoughts on a statewide cancer management program. We believe that a rational cancer program should be concerned with the patient from the day he is discovered to have the disease until he expires. In the figure it can be seen that the patient enters the cancer management program through the primary care level. A cancer diagnosis may result from a visit to a physician which is motivated by a specific complaint or as a result of a routine physical examination or dental consultation. Under ideal circumstances the patient would first be referred to a team of oncologic specialists representing, among other specialties, surgery, chemotherapy, and radiation therapy. This team would confirm the diagnosis of cancer and decide, on the basis of diagnostic and patient medical data, the appropriate modality or mix of modalities to be employed in the treatment of the patient. The oncologic team should also decide whether the patient's treatment is to be undertaken with curative intent or with palliative intent. Very often, however, the primary care physician refers the patient directly to a single specialty, either surgery or in some cases, radiation therapy, for treatment. There are compelling reasons to believe, and indeed it is a fundamental tenet of the planning at the University of Alabama, that the patient will benefit more if his treatment strategy is decided jointly by a team of specialists than if he is referred directly for treatment to a physician in a single specialty. After treatment the patient is seen in treatment follow-up for a period of time and then enters what I call a pool of patients who have been treated for cancer. From this pool the patients are sent back for periodic visits to the primary care physician who may, if the disease recurs, send the patient on for further treatment. Eventually the patient expires from this pool, either symptomatic or asymptomatic at the time of his death.

A cancer management program should concentrate on all of the functions described in FIGURE 1. There is the medical education program to consider, especially for the primary care physician, as he is the one who makes the initial diagnosis and often sets up the referral plan. As the program begins to function, there should be an increasing number of patients referred to the oncologic team and a decreasing number of patients referred to a single medical specialty for evaluation and definitive treatment. I should also mention that there is a very great problem associated with providing care for the terminal cancer patient here in Alabama as well as in other states. Very often by the time the patient reaches this stage he is economically in very poor shape and has no place to go for the specialized care often required for the terminal patient.

It became very clear to us as we went through the exercise of thinking about a total program of cancer management for the state of Alabama, that it does not make any sense to select only a single aspect of the cancer problem for study. Rather, the cancer problem must be tackled as a whole and resources should not be concentrated on one small aspect of the problem to the exclusion of other, perhaps more serious, problems.

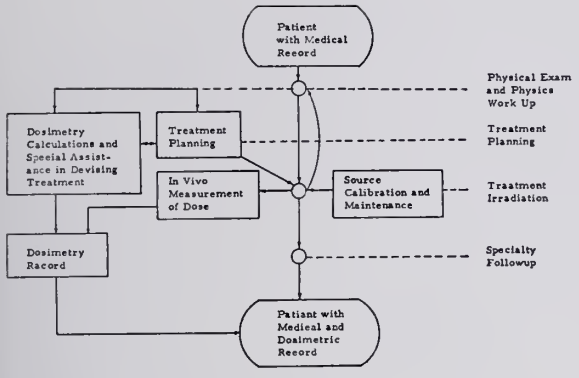


FIGURE 2
Schamatic Illustration of Patient Tracks Through a Radiation Therapy System

Now, with this perspective, we must look within the total program requirements at the requirements for the dosimetry system alone. FIGURE 2 is a schematic illustration of a typical patient track through the radiation therapy system. The functions of the dosimetry system can be conveniently illustrated with the aid of this figure. The first function performed when the patient enters the radiation therapy system is a physical examination and a physics workup. It is at this point that the radiation therapist obtains the medical information required to decide the treatment regimen. Information must also be obtained which will permit the calculation of a dosimetry plan and the design of special devices, such as blocks or boluses, needed for the treatment of the patient. During this phase the dosimetrist must interact very closely with the therapist in deciding the overall treatment plan. Next, the patient is irradiated in a series of treatment fractions. The radiation source, of course, must be calibrated and properly maintained so that the treatment can be given with the required accuracy. In addition, the given dose can also be measured during treatment by the use of in vivo dosimeters for the purpose of assuring that the treatment dose is being properly given. An accurate record must be kept of all important aspects of the treatment so that if the patient re-enters the system at a later date, for further treatment, the radiation therapists will not encounter a serious problem in determining how to treat the patient at that time.

In summary, there are five functions which the dosimetry system should perform. They are as follows: (1) Obtaining the information necessary to calculate an accurate dosimetry plan and special assistance in designing and constructing special items required for the treatment of the patient; (2) Assisting the radiation therapist in planning the treatment (this may include the calculation of several dosimetry plans); (3) The calibration and maintenance of radiation source; (4) The measurement of the given dose by the use of in vivo dosimetric techniques; and (5) The compilation of a complete and accurate dosimetry record which documents the treatment of the patient.

Having defined the functions of the dosimetry system, we now look at the patient load which will have to be serviced by a statewide system. To analyze the load, we divided the state of Alabama into nine regions as shown in FIGURE 3. The division of the state

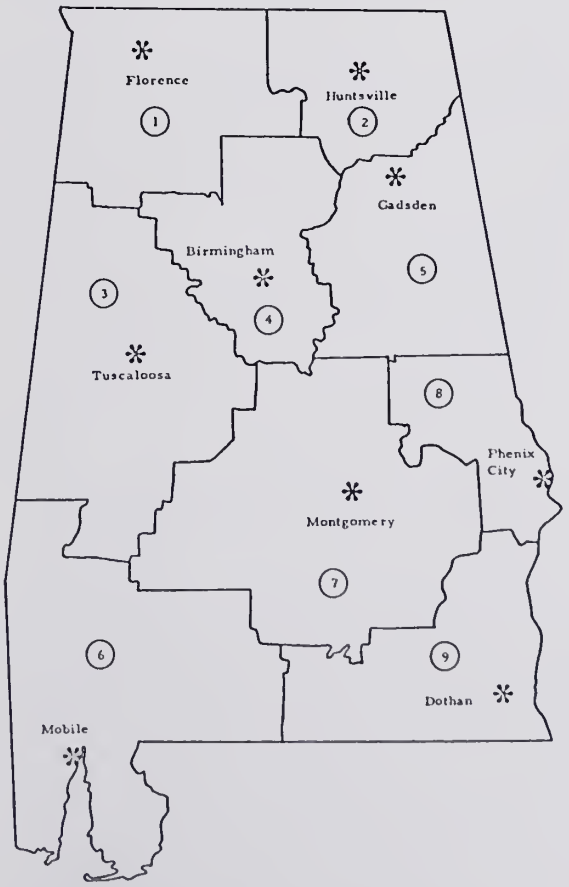


FIGURE 3
Map of the State of Alabama Showing the Regions Chosen for the Study of Patient Loads for A Model Radiation Therapy and Dosimetry System

FIGURE 4

Estimated Number of New Cancer Cases Per Year in 1971 and 1980 and the Beginning Radiotherapy Patient Load Potential for Each Region Shown in Figure 3

Region	Population of Region		Number of New Cancer Cases Per Year in Region Entering the System		Beginning Radiation Therapy Patient Load Potential	
	1971	1980	1971	1980	1971	1980
1	400,000	440,000	920	1,050	460	525
2	315,000	350,000	720	860	360	430
3	275,000	305,000	620	730	310	365
4	800,000	925,000	1,800	2,220	900	1,110
5	305,000	340,000	680	820	340	410
6	500,000	550,000	1,100	1,320	550	660
7	450,000	500,000	1,000	1,200	500	600
8	180,000	200,000	400	480	200	240
9	225,000	250,000	520	600	260	300
TOTAL	3,450,000	3,860,000	7,760	9,280	3,880	4,640

into the regions shown in Figure 3 is arbitrary and was made for the sake of convenience of the present study. We determined the population of each region for 1971 and then projected the population for each region in 1980. We could then calculate the number of new cancer patients per year who would enter a cancer management program of the type discussed earlier and these are shown in FIGURE 4. We allowed for a small percentage of patients not getting into the program for various reasons and we allowed for a small percentage of the patients going out of the state for treatment. Having calculated the new cancer patient load per year, it was then possible to estimate the beginning radiation therapy patient load potential for the state of Alabama in 1971 and 1980. This estimate was made using a guideline prepared by the Committee for Radiation Therapy Studies which states that under ideal circumstances, one-half of the patients who have cancer will eventually require radiation therapy for the management of their disease. There are, of course, other studies which verify this figure.

We then listed the cities in each of the regions currently having (or planning to have) institutions with megavoltage radiation therapy equipment and these are shown in FIGURE 5. The names of the institutions have been omitted in this figure as we do not want to imply that any institution has approved this study, except for, of course, the University of Alabama, which is designated by the letter D. In Figure 5, we have modified the patient load in each region considering the fact that some patients would leave, for example, Region I and go to the University of

FIGURE 5

Geographical Distribution of Beginning Radiation Therapy Patient Loads for 1971 and 1980

Region	City	Institution	Estimated Beginning Radiation Therapy Load (Patients/Year)			
			State 1971	State 1980	Out-of-State 1980	Total 1980
1	Florence	A	95	135	25	160
2	Huntsville	B	175	245	25	270
3	Tuscaloosa	C	150	225	-	225
4	Birmingham	D	800	1,500	300	1,800
		E	230	340	10	350
		F	310	450	15	465
		G	50	75	-	75
5	Gadsden	H	240	340	-	340
6	Mobile	I	200	450	75	525
		J	100	150	-	150
		K	30	50	-	50
7	Montgomery	(L, M)	270	380	-	380
8	Phenix City/ Columbia, Ga	N	-	150	25	175
9	Dothan	P	-	150	25	175
TOTALS			2,650	4,640	500	5,140

Alabama for their treatment. Such modifications were made on the basis of existing and projected referral patterns. We also took into account patients who would come from out of the state. In this way we could calculate the beginning radiotherapy patient load for 1971 and 1980. The number shown for 1971 is considerably below that shown in FIGURE 4 for 1971 because radiation therapy is not being utilized to its fullest potential in the state of Alabama at the present time.

Next, we modified the beginning radiation therapy patient load to take into consideration the fact that many radiation therapy patients return for one or more additional treatments after their initial course of therapy. We then took the radiation therapy patient load and derived the number of treatment courses by curative and palliative intent for both 1971 and 1980. I do not have time at this point to describe the mechanism by which this division was made.

Next, we estimated the growth rate of the patient load from 1971 until 1980 and translated this into growth rates for radiation therapy courses given with curative intent and palliative intent for the period of time under study. With the guidance of Dr. Robert Roth and Dr. Donn Brascho of the University of Alabama and with the help of other noted radiation therapists around the country, we studied the dosimetry requirements for radiation therapy being delivered with curative intent and with palliative intent. We concluded that under ideal circumstances, all patients receiving curative therapy should receive the services of the dosimetry system

being studied and that approximately one-half of the patients receiving palliative courses of therapy would also need the services of the dosimetry system. The remaining palliative patients are those being treated for the relief of pain who do not receive radiation doses which encroach upon the tolerance doses of normal tissues in the irradiated volume. The radiation therapy course load to be serviced by the dosimetry system from 1971 to 1980 is shown in FIGURE 6.

FIGURE 6
Estimated Curative and Palliative Course Load
(Courses/Year) for 1971 and 1980

Region	City	Institution	Estimated Course Load 1971		Estimated Course Load 1980	
			Curative	Palliative	Curative	Palliative
1	Florence	A	69	93	135	155
2	Huntsville	B	120	172	225	260
3	Tuscaloosa	C	110	157	190	220
4	Birmingham	D	560	784	1,510	1,750
		E	168	235	295	340
		F	224	314	390	450
		G	35	49	60	70
5	Cadsden	H	168	235	285	330
6	Mobile	I	140	196	440	510
		J	70	98	125	145
		K	20	30	40	50
7	Montgomery	(L, M)	189	267	320	370
8	Phenix City/ Columbia, Ca	N	-	-	145	170
9	Dothan	P	-	-	145	170
TOTALS			1,873	2,630	4,305	4,990

We also concluded that the dosimetry system should function at a level to permit the therapist to give a dose to the patient such that it would be within ± 5 per cent of the prescribed dose. This, of course, is a very stringent requirement for the dosimetry system and cannot be met unless each of the five dosimetry system functions described earlier is performed very carefully and accurately. It was our conclusion in this study, and we have prepared a separate report on the subject, that the therapist should have a dosimetry system which functions at this level of precision if radiation therapy is to be of maximum benefit to the patient.

Once we had defined the functions of the system and defined the patient load, the next question was how to develop a system which would provide these functions and be able to service the patient load throughout the state of Alabama. After considerable thought, we decided that we should recommend that the radiation therapists in the state of Alabama develop an independent non-profit corporation which would employ a staff to provide these services. This non-profit corporation should hire a new kind of health professional, which we call the *Therapy Associate.*

The Therapy Associate is an individual who has training at the Masters Degree level in two specific areas. First, he is very familiar with radiation physics. He knows how to calculate radiation dose distributions, how to calibrate radiation sources, and how to handle all aspects of radiation physics which are involved in radiation therapy. Second, he must be proficient in cross sectional anatomy. He must know very well the medium in which he is calculating the dose. We believe this latter area to be of particular importance because the Therapy Associate is responsible for obtaining the physical data upon which the treatment plan is based. He will not be able to do this with sufficient accuracy if he does not have a thorough understanding of human anatomy.

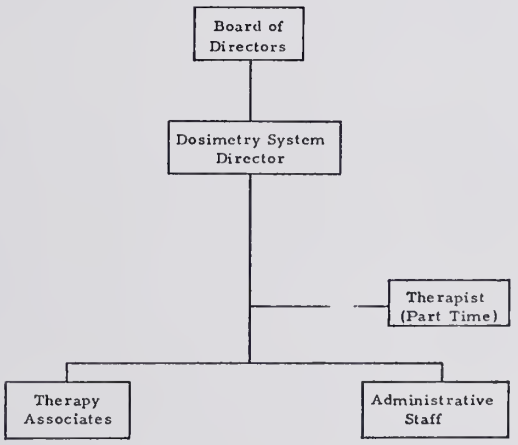


FIGURE 7
Organization Chart for a Non-Profit Corporation
Supplying Dosimetry Services to the Radiation Therapists in Alabama

We propose that the non-profit corporation be organized in a manner shown in Figure 7. The corporation would have a Board of Directors which would consist of the radiation therapist and other health professionals in the state of Alabama. The Board is solely responsible for setting corporate policy. Thus, the responsibility for assuring that the dosimetry system performs at a satisfactory level is placed in the hands of those best qualified to judge the value of the system.

The corporation would have a Director

who would report to the Board of Directors and who would be responsible for the functions of the dosimetry system on a day to day basis. He would hire a therapist on a part-time basis during the beginning years of the system to help with promotional activities. It is a well known fact that an organization such as the one proposed never achieves its full potential unless some effort is put into promotional activities.

The Therapy Associates would be located throughout the state and visit on a regular basis all institutions where patients are being treated with radiation therapy. They would visit each institution a minimum of one time a week and the frequency of their visits would increase as the need was demonstrated. They would carry with them in a van all the equipment they need to calculate the dosimetry plan, to calibrate the radiation sources and to otherwise perform the services of the dosimetry system.

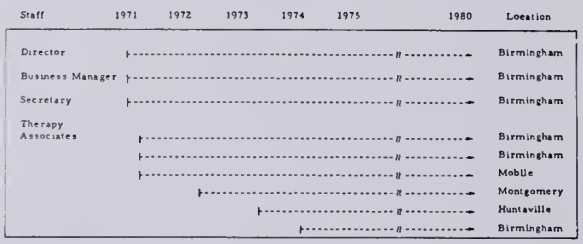


FIGURE 8
Schedule of Staff Acquisition for a Model Regional Radiation Therapy Dosimetry System

FIGURE 8 shows the projected schedule for hiring staff. The headquarters for the Director, Business Manager and Secretary are to be in Birmingham. Of the three Therapy Associates hired, two would be located in Birmingham and one in Mobile. As the system picks up speed, more Therapy Associates would be added, one in Montgomery, one in Huntsville, and finally another in Birmingham. Again, this would be a travelling group of people who would go to the institutions at which patients are treated with radiation therapy and while there assist the radiation therapist and his staff in treating the patients.

We did a fairly detailed cost analysis of the system which included all of the costs that we could foresee. On the basis of this analysis, we concluded that the dosimetry system could become fiscally self-supporting if a fee is charged for its services. We suggest that a reasonable fee for services pertaining to a curative course of therapy would be $80, and the fee for a palliative course would be $40. These were fairly arbitrary and would have to be set in negotiations with the third party carriers since they must ultimately decide the level at which they are willing to reimburse the patient for such services. The results of

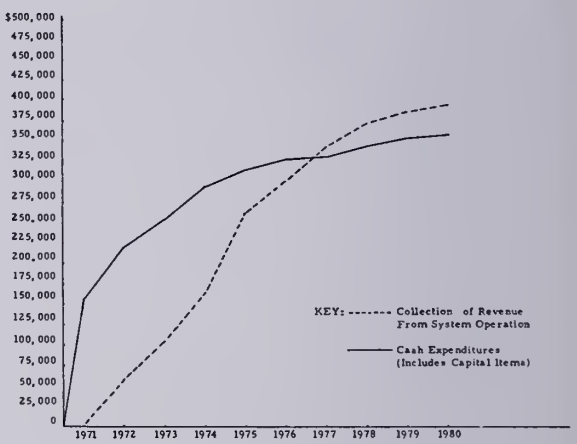


FIGURE 9
Dosimetry System Cash Flow Analysis

a cash flow analysis are shown in Figure 9 and it can be seen in this figure that the system begins to generate a surplus of cash in 1977. It would require, in order to initiate the system, about $700,000 of working capital, but this could be repaid from surplus funds after 1977. The dosimetry system is designed to perform very comprehensive functions for the radiation therapists in the state and it should be emphasized that it is not an inexpensive system in terms of startup costs.

A question arose concerning the amount of travel done by the Therapy Associates. Do they spend too much time traveling? We did a detailed operational analysis of their time and the results are shown in FIGURE 10. By 1972, if the system is implemented, there will be three mobile units in operation. Eventually there will be six. The amount of time allocated to the delivery of the services of the dosimetry system by the Therapy Associates ranges from about 28 per cent of his time in 1971 to about 62 per cent in 1980. The per-

FIGURE 10
The Results of a Time Analysis for the Therapy Associates

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Number of Mobile Units in Operation	System Organization and Staff and Equipment Buildup	3	4	5	6	6	6	6	6	6
Percent of Time Allocated to Delivery of Systems Services		28%	30%	36%	46%	50%	54%	58%	60%	62%
Percent of Time Allocated to System Promotion		30%	30%	25%	15%	12%	8%	4%	2%	-
Percent of Time Allocated to Logistics (travel, setup, repacking)		20%	18%	17%	17%	16%	16%	16%	16%	16%
Percent of Time Allocated to Vacations, Sick Leave and Maintenance		11-1/2%	11-1/2%	11-1/2%	11-1/2%	11-1/2%	11-1/2%	11-1/2%	11-1/2%	11-1/2%
Percent of Time Allocated to Attendance at Meetings, Lectures		10-1/2%	10-1/2%	10-1/2%	10-1/2%	10-1/2%	10-1/2%	10-1/2%	10-1/2%	10-1/2%
Total Percent		100%	100%	100%	100%	100%	100%	100%	100%	100%

centage of his time devoted to promotional activities starts out at 30 per cent and eventually drops to 0 per cent as the system gathers speed. The percentage of time allocated to logistics, such as traveling and packing up, ranges from 20 per cent in the beginning to 16 per cent in 1980. Vacation and sick leave total about 11½ per cent. This leaves approximately ten per cent for attending meetings and so forth. On the basis of this analysis and other analyses of the operational aspects of the system we conclude that the system is feasible.

Finally, two important points should be emphasized. First, the non-profit corporation through which the dosimetry services are supplied is under the control of a Board of Directors. The radiation therapists in the state of Alabama sit on the Board of Directors and thus are in the proper position both to observe the performance of the system and to change its methods of operation if the performance is not satisfactory. Second, the justification for and the anticipated success of the dosimetry system developed in our study are strongly linked to the development of a total system for cancer care delivery in the state of Alabama, aimed at providing modern cancer therapy to all citizens regardless of where they might happen to live. Without such a total system many patients who could benefit from radiation therapy will not be referred for treatment either because of the unavailability of quality radiation therapy care within a reasonable distance from their place of residence or the referring physician's lack of knowledge concerning the value that radiation therapy may have in the management of his patient. If radiation therapy does not achieve its proper role on a statewide basis, the proposed model dosimetry system cannot achieve a patient load sufficient to become viable in either an operational or a financial sense. As part of our study, we investigated the sensitivity of the dosimetry system to income and concluded that the system could not function if its income were to decrease by more than 30 per cent of the projected income. This leads us to conclude that unless the dosimetry system is designed and functions as part of a total cancer management system for the state, it is not at all feasible.

In closing, I would like to take this opportunity to thank the many physicians in the state of Alabama who worked with us in this study. All of our staff have been very much impressed with the depth of commitment on the part of Alabama physicians towards finding a better way of providing care for cancer patients in the state of Alabama.

Methotrexate: Its Use In Psoriasis

Psoriasis has for ages challenged the physician's therapeutic resources. A recurrent disease, it is characterized by exacerbations and remissions which sometimes are difficult to control with conventional therapies.

Some cases of psoriasis which are severe, disabling and resistant to conventional therapy have been effectively treated with the anti-metabolite drug, Methotrexate.

The Food and Drug Administration and the FDA's Advisory Committee on Dermatology have reviewed a series of clinical investigations and based on the recommendations of the Advisory Committee, the FDA has concluded that Methotrexate is safe and effective for the treatment of certain cases of psoriasis.

The FDA-approved directions for use in these cases will soon be available from the manufacturer, Lederle Labs., and should be reviewed carefully before the drug is used in the treatment of psoriasis.

The labeling of Methotrexate restricts its use in psoriasis to severe, disabling, proven cases recalcitrant to more conservative treatment and makes the following recommendations:

—screening of patients by all appropriate parameters to exclude administration of Methotrexate to pregnant women and to patients with preexisting renal, hepatic, or hematopoietic disease;

—screening of patients to disclose any preexisting infections that might be activated by use of an immunosuppressive agent; and

—ensuring the availability of facilities for close medical and laboratory supervision of patients receiving the drug for psoriasis. Supervision should include CBC, urinalysis, serum creatinine, liver function studies, and liver biopsy, if indicated.

Methotrexate should be used only by physicians who are thoroughly familiar with the severe adverse effects, including deaths, associated with the use of anti-metabolite drugs. Deaths that have occurred during Methotrexate treatment for psoriasis usually have been preceded by signs and symptoms of bone marrow aplasia (e.g., hemorrhagic enteritis). Patients should be fully informed of the risks involved and closely monitored. The drug should be discontinued promptly in the event of developing renal or hepatic toxicity.

Methotrexate has been marketed for 18 years as an important representative of anti-neoplastic chemotherapy. Use of an anti-neoplastic drug for treatment of an incurable dermatologic condition must be carefully weighed by the physician after consideration of the risks and benefit to his patient.

Methotrexate should be used only when other, less toxic drugs have failed to bring improvement to patients disabled with severe psoriasis. Please note that the drug is to be dispensed to patients *by physicians only.*

FDA Drug Bulletin/October 1971

PLACEMENT SERVICE

(Continued from Page 576)

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11

Opportunity for associate in general practice or take over general practice in town of 1,200 population in south central Alabama with trade area of 5,000 population. Well established practice and well equipped office. Located near recreational area. PW-1/12

Opportunity in town of 3,000 population in trade area of 15,000 located in West Alabama. Clinic building available with equipment. Farming and several small industries. Several schools and churches. PW-1/13



Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Even patients on special diets will find soups they can enjoy among the more than 50 different varieties available.



Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

the 3 phases of Eve



All women are not equal in their endogenous hormonal output. And, while all oral contraceptives are fundamentally effective, they exhibit **differences in their activity levels and estrogen-progestogen ratios that affect different women differently**—in both short and long-term use. Some brands may be insufficient for the woman's needs or else may exceed them.

Searle offers a family of O.C. products that covers the range of women's needs to help you provide the right pill for the right woman at the right time.

References **1.** Editorial. Oral Contraceptives: Which Pill for Which Patient? Patient Care 3:90-115 (Feb.) 1969 and 4:135-145 (June 15) 1970. **2.** Greenblatt, R. B. Progestational Agents in Clinical Practice. Med. Sci. *18*:37-49 (May) 1967. **3.** Kistner, R. W. Gynecology: Principles and Practice, ed. 2, Chicago, Year Book Medical Publishers, 1971. **4.** Kistner, R. W. The Pill: Facts and Fallacies About Today's Oral Contraceptives, New York, Delacorte Press, 1968. **5.** Nelson, J. H. Clinical Evaluation of Side Effects of Current Oral Contraceptives. J. Reprod. Med. 6:50-55 (Feb.) 1971. **6.** Orr, G. W. Oral Progestational Agents: Therapy and Complications. S. Dakota J. Med. *22*:11-17 (Jan.) 1969

the Ovulen phase

Most women* with a **balanced hormone profile a normal menses** do best on a middle-of-the-road p that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts feminine appearance, healthy skin and hair. Vagin cytology slide—balanced "pink and blue.")

Some women having problems on other O.C.s might do well on Ovulen.

Ovulen has a distinctive hormonal balance that combines moderate estrogenic activity with a slig progestogen dominance. It has an excellent recor of patient acceptance.

Ovulen®

Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg.

SEARLE

see following page.



the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

(*Typical clues—shorter, plumper, full-breasted, with glowing skin and no wrinkles. Vaginal cytology slide "pink.")

Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

Demulen®

Each white tablet contains ethynodiol diacetate 1 mg / ethinyl estradiol 50 mcg.
Each pink tablet in Ovulen-28® and Demulen® 28 is a placebo, containing no active ingredients.
Both Ovulen and Demulen are available in 21- and 28-pill schedules

the Enovid-E phase

Some women* who secrete **less estrogen** than mos do best on a pill with a moderate estrogen overbalance.

(*Typical clues—oily complexion, acne, hirsutism masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome
early-cycle bleeding
scanty menses
intermittent depressio
increased appetite
steady weight gain
vaginal candidiasis

Enovid-E not only provides increased estrogenic activity with low progestogen activity, but also contains the only progestogen that is not antiestrogenic. Therefore it offers less risk of high-dose progestogen side effects.

Enovid-E®

Each tablet contains norethynodrel 2.5 mg / mestranol 0.1 mg.

Oral contraceptives are complex medications and, after reference to the prescribing information, should be prescribed with discriminating care.

for the 3 phases of Eve:

a family of O.C. products

Ovulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold; while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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SEARLE Products of SEARLE & CO.
San Juan, Puerto Rico 00936

Enovid-E®

norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

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Where "The Pill" Began



Pediatricians Issue Statement On Teen-Age Pregnancy

The procedure of abortion for teen-age girls must never become a routine technical event in the lives of young people, the American Academy of Pediatrics has cautioned in a statement appearing in the AAP's current *Newsletter*.

The statement, prepared by the Academy's Committee on Youth, and endorsed by its Council on Child Health, emphasizes that "every effort must be made to insure that a concerned, dignified, and enlightened care situation is developed for these young patients."

Stressing that the American Academy of Pediatrics prefers neither to sanction nor to forbid the use of abortion to terminate an unwanted pregnancy in the teen-age girl, the AAP states that it "does have the responsibility to insist that physicians considering this recourse provide for appropriate counseling and support for those adolescent girls and other involved persons, including the young fathers."

Also important is the need for the pediatrician who is unable to adequately provide counseling support to act as the pivotal person in arranging for a social worker, pastor, or other experienced counselor to provide this essential care, both before and after the procedure.

Continuing, the Academy points out that the pediatrician must make certain that adequate information and sex counseling are available to his teen-age patients. The AAP further urges in its statement that contraceptive advice and prescription for the sexually active teen-age girl should be accompanied by investigation and alteration of contributing issues wherever possible.

"Continuing long-term support directed toward facilitating personality development is an integral part of the care situation. Abortion must never be allowed to replace adequate preventive care or contraceptive measures."

Indicating that although abortion is a possible solution to an unwanted pregnancy in a teen-age girl, the Academy emphasizes that this procedure itself is often replete with problems, ambivalent feelings, and guilt.

"The pregnant teen-ager is often alone, or feels alone, is frightened, frequently estranged from her family and, on occasion,

emotionally disturbed. The physician, using tactful persuasion and appeal, should make every attempt to have the girl involve her parents in making her decisions. Handled with care and concern, it is possible at times for reconciliation in family relations to take place, bringing parents and daughter into a mutually supporting role."

The statement also points out that the physician entrusted with the care of an adolescent girl frequently must serve as her advocate.

"He should try to help her make an appropriate decision regarding her pregnancy," the statement urges. "If she elects abortion, the physician must determine that the procedure will be conducted under optimum medical conditions by a skilled accredited physician."

"The physician advocate must safeguard the physical and emotional welfare of the essentially defenseless teen-age patient and in so doing protect her rights of confidentiality," the statement affirms.

The Academy concludes by emphasizing that the decision by the patient to terminate her pregnancy by abortion does not end her need for further care.

"Continuing support and guidance are the essentials of a rehabilitative program with the pediatrician acting as the coordinator. In addition, encouragement of continued education, job training, and assistance with employment must follow."



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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation and increased blood pressure. One published report described T wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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Fathers and Sons in Medicine

The Gibsons I & II Veterans Of World War— I & II

Wherever crucial battles in American history have been fought, there will be found Alabamians, in the thick of it. As combat is a young man's job, most of those in the ranks have yet to choose their profession or occupation.

But it is significant that some in lethal contact with the enemy will come away from there determined on a career of lifesaving. One such was 19-year-old Herbert Daniel Gibson, of Enterprise in Coffee County.

The weather conspired with the enemy to compound initial successes when Hitler's armies struck back, like cornered rats, in December, 1944, in what is remembered today as the Battle of the Bulge. And its successes might have been extended but for a beleaguered garrison that held on doggedly to a Belgian town named Bastogne. It is remembered generally because of Gen. McAuliffe's one-syllable reply to a German demand for surrender: "Nuts!"

When Gen. Patton's armor cut a corridor through the bristling enemy lines to relieve Bastogne, it found among the wounded the Enterprise boy, Gibson. He was hospitalized to England suffering also from frostbittten feet, for that December weather had been bitterly cold.

It all started back in 1889 when Doctor Franklin Gibson, living in Daviston, over in Tallapoosa County, became the father of a bouncing boy whom he named for the idol of the old South: Edward Lee Gibson. Unlike the father, who had been named for the statesman who signed the Declaration of Independence, young Edward Lee would have to earn his title of "Doctor."

This he proceeded to do, going through



Dr. E. L. Gibson and son Dr. H. D. Gibson

Lineville Junior College to the University of Alabama School of Medicine, from which he received his M. D. degree in 1913. He spent a year at Hillman Hospital, six months of it in surgery. In 1914, the 25-year-old Dr. Gibson went to Coffee County to begin practice. It was a critical year that saw the price of cotton drop to four cents a pound. It was hardly worth baling, and for a beginner medicine was hardly worth practicing—at least monetarily.

In 1915 Dr. Edward Lee Gibson became associated with Dr. Porter T. Fleming in the 14-bed Enterprise Hospital, and ultimately they became brothers-in-law, marrying sisters. Dr. Fleming married the eldest of the Hutchison sisters of Enterprise, Dr. Gibson the youngest, Bess.

Four sons were born to the Gibsons, three of whom grew to maturity. One is in a civil

service position in Georgia, another is teaching at Enterprise Junior College, and the third of course is the second subject of this sketch.

Meantime, along came World War I in 1917, and the young father promptly enlisted. But a baby was on the way and, because of threatening complications, service was postponed to June, 1918, when his title was changed "for the duration" from Doctor to Lieutenant. He saw his active service at Camp Joseph E. Johnston, Jacksonville. Mrs. Gibson died three years ago.

Herbert Daniel Gibson was born on Thursday, August 27, 1925, at Enterprise. He had finished his public school education and was on the eve of entering the University of Alabama when the tightening demands of war took precedent, and he became a paratrooper, with combat experiences already recounted.

Young Herbert Gibson returned home after doctors in England had saved both frost-bitten feet and patched up his wounds. Graduating with his M. D. degree from UAB Medical College in 1955, he took his residency at Lloyd Noland.

Herbert Daniel Gibson, M. D., is married to the former Jane Brown of Enterprise, and they have three daughters. The youngest, Elizabeth, will be graduated from Enterprise High School in the spring. The middle daughter, Lee, is today Mrs. Danny Bradley of Enterprise. And the eldest Jan is today Mrs. Warren Rollins, whose husband should be receiving his M. D. degree from the University of Alabama School of Medicine this same month, February, in which the article about the Gibsons of Enterprise is scheduled for publication. Which is, by marriage, a third generation in medicine in the Gibson family.—W. J. M., Jr.

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A Widower, 50-Year Club Member Now Lives In Mississippi

A native Mississippian who came to Alabama, to Birmingham, for the duration of his active practice, and then returned to his home state after the death of his wife and his retirement because of ill health, is the 10th of 11 members of MASA's 50-Year-Club for 1972.

Harry Reed Farmer was forn in Como, Mississippi, in March, 1898, graduating from high school before going to the University of Mississippi at Oxford for his pre-med work. From there he went to Tulane for his M. D. degree, awarded to him in 1922.

Dr. Farmer went immediately to the Tennessee Coal and Iron Company clinic in Birmingham and, except for a special residency in Eye, Ear, Nose and Throat (EENT) in Philadelphia, continued with TCI until his retirement three years ago, latterly as head of his department.

This 50-Year-Club member was married to a Canadian, Miss Louise Haggard, who died several years ago. There were no children.

Dr. Farmer has since made his home with his brother, Charles Emerson Farmer, who was for 19 years superintendent of schools in Columbus, Mississippi, and subsequently served a four-year term as sheriff. Mr. Farmer, by the way, is also an alumnus of the University of Mississippi, where he earned his letter in baseball. There is also a sister, Mrs. Miles S. Dew, who is now residing in the Como home of their childhood.

There was no available picture of Dr. Harry Reed Farmer to accompany this article about him.

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Alabama Department of Public Health

Nursing Homes For Senior Citizens

By Joyce Murphree*

Brick and mortar do not make a home. It's the love, the caring, the warm atmosphere inside the walls that count. A home is security, familiar surroundings, comfort, and no visiting hours.

Happiness was when Grandma and Grandpa lived their retirement years together in their own home, whether it was of brick and mortar or of rough boards with a tin roof. Maybe wind did come through the cracks on a cold winter day, and maybe there was only a fireplace for heat. But it was their home, they were together, and they were independent. There were chores to be done—a cow to milk, leaves to rake, chickens to feed, a garden in which they grew their own vegetables. Chores kept them busy, gave them a sense of worthiness, helped them to be independent; and the activity was good for their physical and mental health.

That's the way it was, but no more for thousands of Alabamians spending their last years in nursing homes. Nursing homes are products of the changing American life style. Institutional care is not the answer to the dilemma of the senior citizen, many professionals in the health field firmly believe. The concept has many fallacies, the principal one being that if you give a person food, shelter, and medical care, he will be happy.

Elliot L. Richardson, secretary of HEW, recently said: "Many elderly persons neither want nor need nursing home care, but we as a society are literally railroading our aged into institutions. We are willing to pay for those institutions, but we are not willing to make it possible for our elderly to enjoy the freedom of choosing where they spend their last years on earth."

Alabama has approximately 170 nursing homes providing care for an estimated 11,000 people. Most of these fall in the senior citizen category. Some have health problems which require constant professional care; however, many do not. They are capable of caring for themselves and may suffer physically and mentally because they are not allowed to do so.

Although nursing homes may not be the ideal solution to care of the aged, they seem to be the best alternative at the present time. The Bureau of Licensure and Certification of the Alabama Department of Public Health works with nursing home staffs to help provide the highest level of care possible. In a sense, the bureau is a consumer protection agency, applying standards of care on behalf of the patients. The bureau is the official inspection and enforcement arm of the State Board of Health.

Enforcement doesn't involve badges and billy clubs, however, points out James H. Ammons, medical services officer in the Bureau of Licensure and Certification. Education is the basic approach. "Most nursing home administrators are more than willing to meet our standards," Mr. Ammons explains. "We offer them our expertise in health care to help them conform to standards."

The Bureau of Licensure and Certification has consultants in physical therapy, nursing,

*Information Specialist, Alabama Department of Public Health.

medical social work, dietetics, pharmacy, and medicine. There is presently a staff vacancy for a medical records librarian consultant.

The consultants visit the nursing homes, point out deficiencies, and assist the nursing home staffs in correcting the problems. "We feel it would be unfair to enforce standards without offering them guidance," Mr. Ammons asserts. "After all, our first consideration is the welfare of the patient. That's our reason for being. What would we accomplish if we went in with a punitive attitude and did nothing to help correct the situation?"

Although the objective is to provide the highest level of patient care, the consultants' expertise sometimes results in financial savings to the nursing home. Changes in food service procedures can save man hours. The pharmacist often can point out ways of saving on drug costs without sacrificing quality. Nursing home administrators are encouraged to utilize the skills of their nursing personnel more effectively by relieving them of paperwork and tasks which can be done by aides and orderlies.

"Sometimes we can do nothing more than sympathize," Mr. Ammons admitted. "Nursing homes have their problems, not the least of which is money. We tell them they must provide high quality care and yet they must provide it at a cost which the patient or the patient's family can afford to pay." Most patients receive benefits through the Medicaid or Medicare programs, but they still must supplement these payments from their own resources.

The physical facilities of nursing homes in Alabama probably rank above the national average. Millions of dollars from the Hill-Burton program and private enterprise have gone into construction of nursing homes in recent years. "We are more concerned now with services than conditions of the buildings when we make surveys," Mr. Ammons noted.

"I'm confident that nursing homes, generally speaking, provide high quality patient care," Mr. Ammons stressed, "but they are still institutions and have the inherent shortcomings of institutions. As of now, we haven't come up with anything better, and after all, they wouldn't exist if there were no demand for their services. Until the system changes, we'll do our best to make the nursing home concept work."

Way Opens To MPH Degree

The Maternal and Child Health Program of the University of California School of Public Health at Berkeley announces postgraduate courses of instruction for pediatricians, obstetricians, and other physicians interested in receiving training in the field of Maternal and Child Health. These programs all lead to the degree of Master of Public Health.

Applications are now being accepted for the group entering September 1972. For information, write to Helen M. Wallace, M. D., School of Public Health, University of California, Berkeley, California 94720.

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AMA Policy

The American Medical Association has recently published a compilation of policy positions relating to the practice of medicine. The Journal will publish these policies each month as space permits.

It is suggested that physicians clip and file them for future reference.

Drug Dependence—Methadone Maintenance

The AMA recommends that methadone maintenance programs include at least: (1) facilities to collect and test urine for the presence of drugs; (2) general medical, psychiatric and hospital services; (3) adequate staff and (4) rigid controls of dispensing methadone to prevent illicit sale or intravenous use. It urges that evaluation and research of the programs be continued.

The Association believes methadone maintenance is not feasible in the office practice of private physicians. The individual physician cannot provide all the services and controls required. Physicians should, however, cooperate with methadone maintenance programs in their communities and offer whatever services they may be capable of providing. (Council on Mental Health and Committee on Alcoholism and Drug Dependence, March 16, 1971)

Drugs—Adverse Reactions

The AMA will increase its educational programs on drug usage and encourage Committees on Pharmacies and Therapeutics in each hospital to review drug reactions and to take appropriate control measures. The AMA will evaluate and disseminate such findings. (June 1970)

Drugs—Anti-Substitution Laws

The AMA declares it is contrary to the public interest to repeal or modify the anti-

(Continued on Page 617)

Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.

(Continued from Page 612)

substitution laws in order to permit the filling of prescriptions with agents not intended by the prescribing physician. It vigorously supports the enforcement of the anti-substitution laws and resists their repeal. (June 1970)

FDA

The AMA opposes the evaluation of drugs and their possible subsequent withdrawal from use without prior consultation with representative groups of private practitioners who are most familiar with and experienced in their use. It urges that future drug efficacy panels include more private practitioners. (June 1970)

The association urges the FDA to consult with clinical experts and give more consideration to the overall welfare of the public before it proclaims that a generally accepted method of treatment be changed. (June 1970 re Orinase, the oral anti-diabetic drug)

The AMA will discuss with the FDA the development of a proper modus operandi to be used by the FDA in release of information on drugs which are alleged to be ineffective or to have harmful side-effects. (June 1970)

Fees

The AMA reaffirms that reimbursement for physicians' services under private or government financing programs be on the basis of "usual, customary, or reasonable fees." A committee of the physician's peers may appropriately review and pass upon the equity and justice of his charge, but this shall not be determined by any other person, organization or agency. (Dec. 1970)

The House vigorously opposes the legislation pending before Congress which would "single out the medical profession to establish arbitrary fee limitations." (Dec. 1970)

The physician has the obligation to assure that his patient is acquainted fully with the fee for services rendered or to be rendered. (June 1970)

The Board of Trustees is instructed to urge all state and local societies "to act swiftly and firmly in all instances of known exploitation and excessive charges for health care that may occur in their jurisdictions." (June 1968)

The AMA does not approve any program promoting the charging of excessive fees or interfering with physician's right to charge fees commensurate with his services. It is unethical to charge an excessive fee. The fee should be commensurate with the services rendered and the patient's ability to pay. (Nov. 1965)

Drugs—Generic-Brand Prescribing

Drugs of identical chemical composition (so-called generic drugs), formulated and marketed by numerous individual firms are not necessarily "therapeutic equivalents."

Laws mandating generic prescribing are undesirable, pending further technological advances which prove a generic drug will have effects identical to those of a brand-name drug. (JAMA editorial, Feb. 16, 1970)

Physicians should be free to use either the generic or brand names in prescribing drugs and are encouraged to supplement medical judgments with cost considerations in making this choice. (June 1967)

Present quality standards imposed voluntarily by the American pharmaceutical industry should not be abridged or usurped by any federal agency; and any (national) drug compendium devised should be made avail-

(Continued on Page 620)

When you prescribed Orinase®

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14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures necessary for optimal control with insulin are also necessary with Orinase. The patient on Orinase must be fully instructed: about the nature of his disease; how to prevent and detect complications; how to control his condition; not to neglect dietary restriction, develop a careless attitude or disregard instructions relative to body weight, exercise, personal hygiene, and avoidance of infection; how to recognize and counteract impending hypoglycemia; how and when to test for glycosuria and ketonuria; how to use insulin; and to report to the physician immediately if he does not feel as well as usual.

Caution, very close observation, and careful adjustment of dose are necessary when: insulin is withdrawn during the initial period in order to avoid ketosis, acidosis, and coma; thiazide diuretics are administered which may result in aggravation of diabetic state and increased tolbutamide requirement, temporary loss of control, or even secondary failure; treating patients with impaired hepatic and/or renal function and debilitated, malnourished, or semistarved patients in order to avoid severe hypoglycemia which may require corrective therapy over several days; and treating patients with severe trauma, infection, or surgical procedures where temporary return to insulin or addition of insulin may be necessary. Response to tolbutamide is diminished in patients receiving therapy with beta blocking agents.

As some diabetics are not suitable candidates, it is essential that the physician familiarize himself with the indications, limits of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, and during the initial test period should communicate with the phy-

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And that means you know quite a bit about it.

On the one hand, you know that diet and weight control are the initial and essential foundations for the management of adult-onset, non-ketotic diabetes. When these measures prove satisfactory, no additional therapy is indicated. On the other hand, you know that if these measures fail the addition of Orinase to the regimen can often help lower blood sugar. Orinase lowers blood sugar as effectively today as it did when you first prescribed it.

You also know the importance of close monitoring of the patient. Although uncommon, severe hypoglycemia may occur if the dosage is not tailored to suit his requirements.

In short, Orinase is a drug you're familiar with, and probably have confidence in.

And that may be the best recommendation Orinase can have.

Orinase®

0.5 g. tablets

(tolbutamide, Upjohn)

an daily, and during the first month report at least once weekly physical examination and definitive evaluation. After a month, aminations are recommended monthly or as indicated. Appearance of ketonuria, increase in glycosuria, unsatisfactory wering or persistent elevation of blood sugar, or failure to tain and hold clinical improvement indicate nonresponsiveness to Orinase (tolbutamide). Orinase does not obviate need for aintaining standard diet regulation. Uncooperative patients ould be considered unsuitable for therapy. Prescriptions should refilled only on specific instruction of physician. In treating ld asymptomatic diabetic patients with abnormal glucose erance, glucose tolerance tests should be obtained at three- six-month intervals. Orinase is not an oral insulin or a substite for insulin and must not be used as sole therapy in juvenile abetes or in diabetes complicated by acidosis or coma where sulin is indispensable.

If phenformin is prescribed in combination with Orinase, appropriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, ay occur and may mimic acute neurologic disorders such as rebral thrombosis. Certain factors such as hepatic and renal sease, malnutrition, advanced age, alcohol ingestion, and renal and pituitary insufficiency may predispose to hypoglymia and certain drugs such as insulin, phenformin, sulfonades, oxyphenbutazone, salicylates, probenecid, monamine idase inhibitors, phenylbutazone, bishydroxycoumarin, and henyramidol may prolong or enhance the action of Orinase and crease risk of hypoglycemia. Orinase long-term therapy has en reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: *0.5 g. Tablets*—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

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(Continued from Page 617)

able solely as a reference source of information. (June 1968)

Emergency Medical Care

The AMA through its Commission on Emergency Medical Services and Committee on Community Emergency Services is striving to: (1) Provide leadership to the multiplicity of medical and lay organizations concerned with emergency medical care; (2) Establish Guidelines for Categorization of Hospital Emergency Facilities; (3) Support the Registry of Emergency Medical Technicians—Ambulance to upgrade the skills of the allied medical personnel on the ambulance; (4) Promote the development of "Community Councils on Emergency Medical Services" through the state and local medical societies and civic groups; (5) Establish a registry of physicians who are qualified and available for service in times of a natural or man-made disaster; and (6) Initiate a nation-wide campaign to use the Star of Life symbol to indicate the availability of emergency medical services. (Dept. of Health Education, April 1971)

Experimentation—Animal

The AMA supports all efforts to improve the care of laboratory animals through research, training and dissemination of information. At the same time the AMA is concerned with the continued progress of medical science which can be applied to the future health of citizens, and thus is opposed to federal regulations on the use of animals in qualified research. (June 1963)

(Continued on Page 623)


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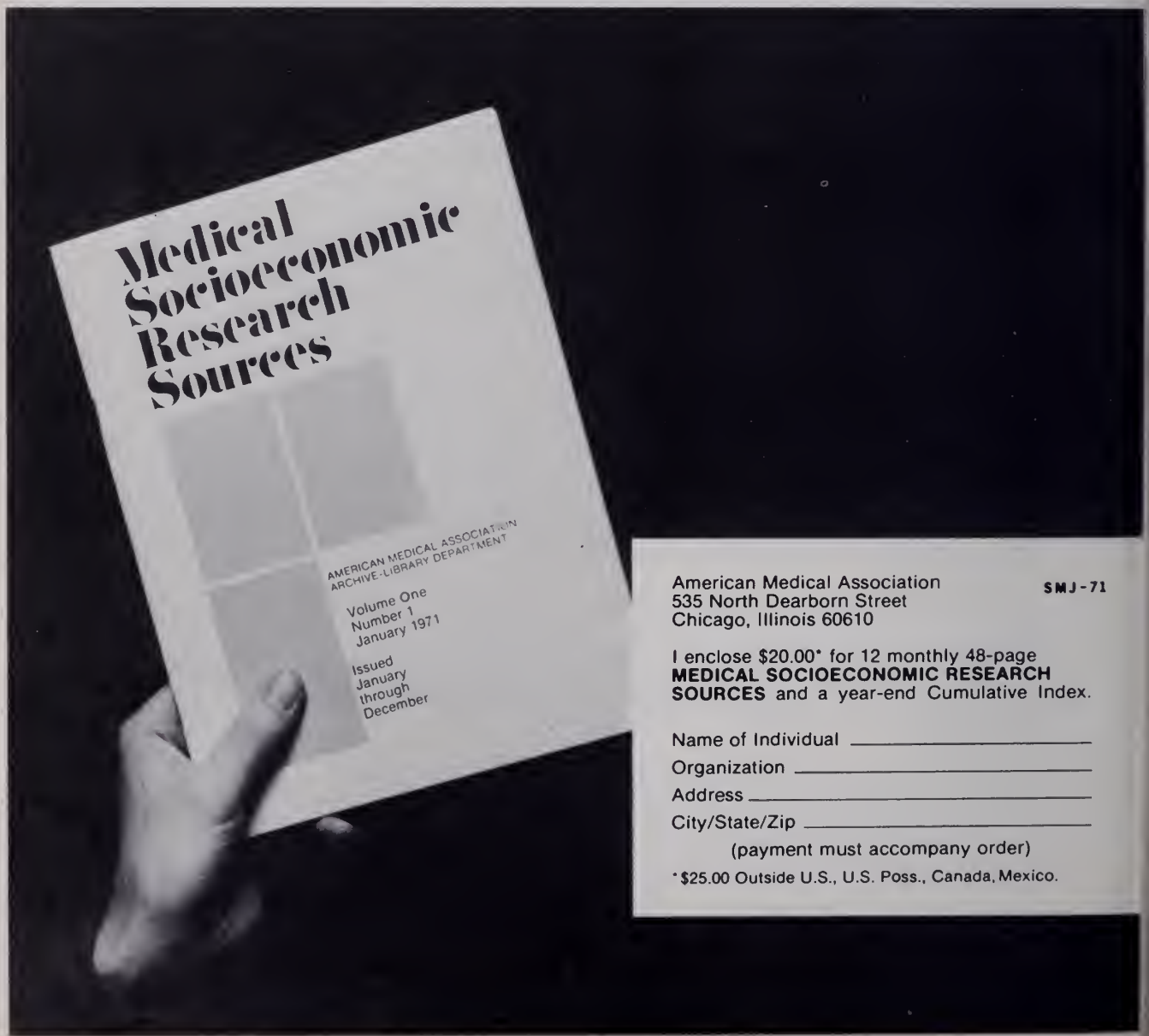
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(Continued from Page 620)

Experimentation—Human

The AMA has adopted guidelines providing that voluntary, informed consent must be obtained; that competent, accepted standards of scientific research must be maintained; that the physician is expected to exercise his professional judgment and skill in the best interest of the patient, or where the research is primarily for the accumulation of scientific knowledge, adequate safeguards must be provided for the welfare, safety and comfort of the subject. (Nov. 1966)

The Declaration of Helsinki, propagated by the World Medical Association, was adopted by the House as a guide to those engaged in clinical investigation. (June 1966)

See also Organ Transplants

Family Practice

The AMA reaffirms its support for the increase in primary, personal and/or family physicians by all appropriate and practical means. (June 1970)

The Association's Ad Hoc Committee recommends: (1) Major efforts be instituted promptly to encourage the development of new programs for the education of large numbers of family physicians for the future; (2) Medical schools and teaching hospitals be urged to explore the possibility of developing models of family practice, in cooperation with the practicing profession; (3) New sources of financial assistance be developed for the support of family practice teaching programs; (4) Careful attention be given to the factors which serve as incentives to medical students to enter this field; and (5) A study should be made of the effect of premedical programs, admission procedures and curricula upon the production of family physicians. (Nov. 1966)

A family physician is: "A personal physician, oriented to the whole patient, who practices both scientific and humanistic medicine. Usually he himself provides medical care in more than one of the traditional specialty fields of medicine, and he coordinates the care obtained by referral to or consultation with other physicians. He assumes responsibility for the patient's comprehensive and continuing health care and in effect serves as captain of the health team." (Nov. 1966)

NASA-Stanford Research Team Targeting Heart Disease

A unique approach to solving significant medical problems in heart disease will be used by a newly-founded NASA-Stanford University research team.

This Biomedical Technology Transfer Team (BATEAM) will apply aerospace technology generated by the National Aeronautics and Space Administration to major problems in the field of cardiology.

(Continued on Page 626)

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Y nings: If hypersensitivity reactions oc- ci drug should be discontinued immedi- ay and not resumed. Rarely, erythema n tiforme has been associated with thia- b dazole therapy; in severe cases (Stevens- J nson syndrome), fatalities have oc- c red. Because CNS side effects may o ur quite frequently, activities requir- mental alertness should be avoided. S e use in pregnancy or lactation has not b n established.

P autions: Ideally, supportive therapy is a cated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live Ascaris in the mouth and nose. Hypersensitivity reactions include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.

Supplied: Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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(Continued from Page 623)

The team, based at Stanford's School of Medicine, is under the direction of Dr. Donald C. Harrison, Chief of the Division of Cardiology. Under NASA contract, the project is part of NASA's Technology Utilization Program.

The Stanford group, the fourth BATEAM established throughout the country, is the first to be formed at a leading school of medicine.

The Stanford program is also unique in that it will, for the most part, concentrate on problems in only one area, cardiovascular medicine. Several major medical centers on the West Coast will be contacted to obtain significant problems to work on, which may be solvable by NASA technology.

The team will consist of five medical consultants and two administrative staff members from the Medical School, as well as five aerospace engineering consultants. In addition to Harrison, the medical consultants are Drs. Edwin Alderman, William Barry, David Cannom and Richard Crow, all from the Division of Cardiology at Stanford. Deputy director of the program is Harry Miller, research associate and business manager of the division.

NASA currently has eight special teams charged with identifying individual problems and proposing solutions based on aerospace technology. Four of the teams concentrate on environmental problem areas. Four biomedical teams, of which the Stanford research team is one, concentrate on biomedical activities in public health, medical research and clinical medicine.

The new program will increase the joint research efforts of Stanford and the NASA Ames Research Center in Mountain View, California. Ames, the leading NASA center in life sciences research, will be a key technology resource for the new team.

Dr. Harrison and his staff have worked closely with Ames for the past several years, with many clinical innovations resulting. In April, an Ames-Stanford team devised a computer system to watch a movie of the beating of a patient's diseased heart—identifying dead spots or scar tissues in the heart wall, aneurysms (bubble-like projections of the heart muscle) and other malfunctions.



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Call it what you will, it may be premalignant

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



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nd Efudex® (fluorouracil) 5% cream can resolve it.

ll it actinic, solar or senile keratoses, ny regard it as "precancerous."[1,2]

ical fluorouracil, considered by some dermatologists to be a major ance in the treatment of multiple solar keratoses,[3,4] offers the physi- a relatively inexpensive alternative to cryosurgery, electrodesic- on and cold knife surgery. Of the topical fluorouracils available, only dex offers 2% and 5% solution and 5% cream formulations—formula- s that have proved effective in the treatment of these mutliple lesions.

ual duration of therapy, 2 to 4 weeks.

dies showed that with the 2% and 5% Efudex preparations, the usual ation of therapy was only 2 to 4 weeks.[5] Other studies with topical rouracil revealed that when concentrations of less than 2% were d, significant numbers of lesions recurred.[6]

eats the lesions you can't see, too.

merous lesions, not apparent prior to 2% and 5% Efudex therapy, nifested themselves by definite reactions, while intervening skin ained relatively unaffected.[5] The early eradication of these subclini- lesions (which may otherwise have undergone further progression) bably accounts for the reduced incidence of future solar keratoses in ients treated with topical fluorouracil—especially with 5% centrations.[6]

w to identify solar keratoses.

pically, the lesion—a flat or slightly elevated brown to red-brown pule—is dry, rough, adherent and sharply defined. Multiple lesions the rule.

edictable therapeutic response.

e response to a typical course of Efudex therapy is usually racteristic and predictable. After 3 or 4 days of treatment, erythema ins to appear in the area of keratoses. This is followed by a moderate ntense inflammatory response, scaling and occasionally moderate derness or pain. The height of this response generally occurs two ks after the start of therapy and then begins to subside as treatment topped. Within two weeks of discontinuing medication, the ammation is usually gone. Lesions that do not respond should biopsied.

reaces: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, ne & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T. and Honeycutt, W. M.: eatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): rmaceutical Therapeutics in Dermatology, Springfield, Ill., Charles C Thomas, 1968, 2. 3. Belisario, J. C.: *Cutis*, *6*:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, *97*:14, 1968. ata on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and n, E.: *Cancer*, *25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

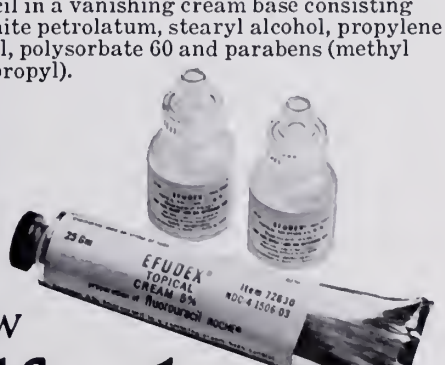
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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DEATHS

ARMISTEAD, Sidney Davidson, M. D.—Dr. Armistead, 84, who had practiced medicine for 61 years before a broken hip forced his retirement last October, died December 30, 1971, in a Montgomery hospital. Survivors include a daughter, Mrs. Clifford M. Wood of Daphne, Baldwin County; three grandsons, Army Capt. Clifford M. Wood, Jr., of Fort Rucker, Ala.; twins, David Wood, Lake Forest, Ala.; Bruce Armistead Wood, Birmingham; and a sister, Mrs. Edna (Armistead) Kittinger, Rumsey, Kentucky. Funeral services were held from the Robertsdale United Methodist Church on Sunday, January 2, 1972, and burial was in the Baldwin Memorial Cemetery, Robertsdale. Dr. Armistead was born June 23, 1887, at Campbell, Ala., Clarke County, and was graduated in 1910 by the University of Alabama Medical College, Mobile, interning in Alabama, and beginning active practice in Texas. He was married in 1913 to Miss Clara Peterson of Chicago. Dr. Armistead was a lieutenant in the Medical Corps of the U. S. Army in World War I, serving in the hospital at Fort Oglethorpe, Ga. Suffering a broken hip in a fall last October, he broke the other hip two months later.

MAJURE, Ernest Odell, M. D.—Dr. Majure, 67, a Medical Corps veteran of World War II, who retired with the rank of Colonel, died Saturday, 8 January 1972 in a Montgomery hospital, after a long illness. A resident of Tallassee, where he was in general practice, he is survived by his widow, the former Gwen (Hornsby) Holt of Tallassee; a daughter, Mrs. Lois Ann Ledbetter of Atlanta; a son, Miles Majure of Mooresville, North Carolina; two stepsons, Kenneth Holt of Bessemer, James Holt of Tallassee; three sisters, Mrs. Kathleen Jolly, Louisville, Mississippi; Mrs. Jane Fox, Philadelphia, Mississippi; Mrs. Una Sanders, Carthage, Mississippi; four brothers, John Majure, Gadsden; Hubert Majure, Oneonta; Lamar Majure, Guntersville; Coyt Majure, Madden, Mississippi; four grandchildren; six stepgrandchildren. Funeral was held Monday afternoon from the First Methodist Church, Tallassee, the Rev. Ben Sawada officiating. Burial was in Pineview Memorial Cemetery, Wetumpka. Dr. Majure served in the European Theater of Operations in World War II, heading a U. S. Army Hospital in France. He recently disposed of his interests in Bama Park, on Lake Martin, which he developed. Active in water improvement and wildlife preservation, he was for some years a member of the Alabama Water Improvement Commission and was twice president of the Alabama Wildlife Federation.

(Continued on Page 632)



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Precaution Prolonged or excessive use of Anusol-HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

Dosage and Administration Anusol-HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol. One suppository in the morning, one at bedtime, and one immediately following each evacuation.

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ANUP-21

DEATHS

(Continued from Page 630)

SAVAGE, Charles Henry, M. D.—Dr. Savage, 81, died December 7th, 1971, at Mobile Infirmary. Survivors include the widow, the former Helen Woolley of Guntersville, and a son, Charles H. Savage, Jr., M. D., both of Mobile. Funeral and burial were in Mobile. Dr. Savage was born October 16, 1890, and received his M. D. degree from Tulane in 1917, promptly entering the Navy. At the time of his retirement in 1940, he was Chief of Surgery at the Brooklyn Navy Hospital, where he held the rank of Commander. From 1940 to his retirement three years ago, Dr. Savage had been in active general practice in Mobile. He was a Fellow of the American College of Surgeons.

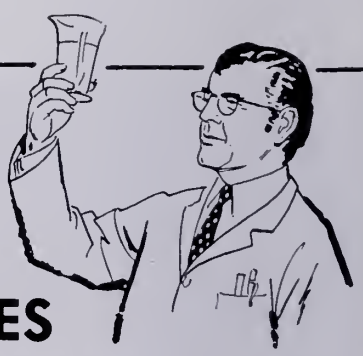
Spectinomycin For Acute Gonorrhea

FDA recently approved spectinomycin* for marketing. The drug is indicated only in the treatment of acute gonorrheal urethritis, proctitis, and cervicitis, when due to susceptible strains of *Neisseria gonorrhoeae.* This antibiotic, a product of *Streptomyces spectabilis,* is active against most strains of *N. gonorrhoeae* in a minimum inhibitory concentration varying between 7.5 and 20 mcg./ml. Cross resistance of *N. gonorrhoeae* between spectinomycin and penicillin has not been demonstrated.

Because of its high degree of efficacy and the long-term experience with penicillin, it is still considered the drug of choice for gonorrhea unless the organism is not sensitive to penicillin or the patient is allergic to penicillin.

FDA Drug Bulletin/October 1971/1

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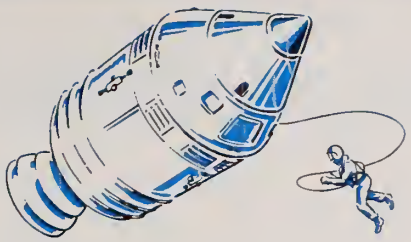
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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

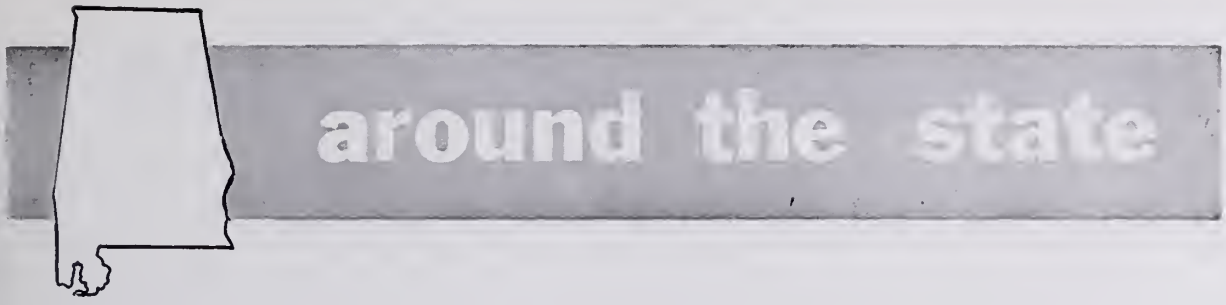
MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals



Vital Statistics

NEW MEMBERS

Clay County

Campbell, John Emory, b 43, mc Alabama '70, recip. NBME '71, The Lineville Clinic, P. O. Box 98, Lineville, Alabama 36266. GP.

Houston County

Burns, Frank Martin, b 39, mc Alabama 65, sb 66, 509 West Main Street, Dothan, Alabama 36301. Oph.

Jefferson County

Bird, Terrell Bedford, b 39, mc U. Tennessee '64, recip. Tennessee '67, 1919 South 7th Avenue, Birmingham, Alabama 35233. R.

Dyke, Peter Cummins, b 34, mc Duke U. '60, recip. N. Carolina '70, 800 Montclair Road, Birmingham, Alabama 35213. Path.

Evans, Walter Burt, b 38, mc Alabama '65, sb 66, 3193-B Minuteman Avenue, Hill A. F. B., Utah 84401. S.

Froelicher, Victor Frederick, Jr., b 41, mc U. Pittsburgh '67, recip. NBME '70, 1914-B Shades Cliff Terrace, Hermitage Apts., Birmingham, Alabama 35216. I-C.

Goldblatt, Edward Lawrence, b 40, mc Alabama '66, recip. NBME '71, 1529 North 25th Street, Birmingham, Alabama 35234. Pd.

Gutierrez-Mazorra, Juan Francisco, b 44, mc W. Virginia '69, recip. NBME '71, 1919 South 7th Avenue, Birmingham, Alabama 35233. Anes. (Resident)

Hankins, John Gordon, b 39, mc Tulane '64, recip. Louisiana '69, 1500-6th Avenue South, Birmingham, Alabama 35205. I.

Harkey, Michael Erin, b 37, mc Yale '64, recip. NBME '68, 1604 Panorama Drive, Birmingham, Alabama 35216. Oph.

Jones, Gaines Franklin, b 37, mc Alabama '63, sb 64, Lloyd Noland Hospital, Fairfield, Alabama 35064. I.

Kneidel, John Henry, b 21, mc Indiana U. '45, recip. Indiana '71, Lloyd Noland Hospital, Fairfield, Alabama 35064. R.

Kreisberg, Robert Alan, b 34, mc Northwestern U. '58, recip. NBME '64, 1919-7th Avenue South, Birmingham, Alabama 35233. I.

Lewis, Roger Kenneth, b 39, mc Cornell U. '66, recip. NBME '70, 3665 Crestside Road, Mountain Brook, Birmingham, Alabama 35223. C.

McLaughlin, Richard Pearce, b 39, mc Alabama 65, sb 66, 1529 North 25th Street, Birmingham, Alabama 35234. I.

Owen, Walter Crawford, Jr., b 38, mc U. Mississippi '62, recip. Mississippi '70, 924 South 18th Street, Birmingham, Alabama 35205. I.

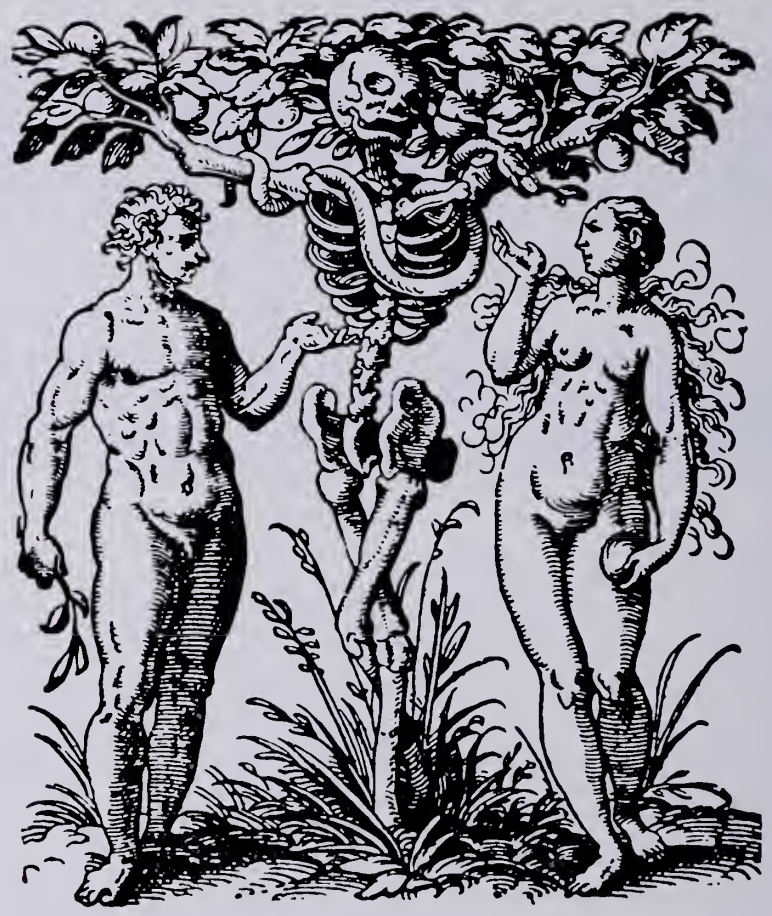
Shadburn, William Burton, b 40, mc Emory '66, recip. Georgia '69, 5328 Westminster Court, Ft. Worth, Texas 76133. S.

Taylor, Charles Bruce, b 15, mc U. Minnesota '41; recip. Minnesota '70, V. A. Hospital, Birmingham, Alabama 35233. Path.

(Continued on Page 638)

In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.
An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask delay the symptoms of incubating syphilis. Patients should carefully examined and monthly serological follow-up fo least 3 months should be instituted if the diagnosis of syphil suspected.

Safety for use in infants, children and pregnant women has been established.

Precautions: The usual precautions should be observed atopic individuals. Clinical effectiveness should be monitore detect evidence of development of resistance of *N. gonorrho*

Adverse reactions: The following reactions were obse during the single-dose clinical trials: soreness at the injection urticaria, dizziness, nausea, chills, fever and insomnia.
During multiple-dose subchronic tolerance studies in no human volunteers, the following were noted: a decrease in he

Trobicin®

sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

h cure rate:* 96% of 571 males, 95% of 294 females
sages, sites of infection, and criteria for diagnosis and cure are defined below.)**

urance of a single-dose, physician-controlled treatment schedule

allergic reactions occurred in patients with an alleged history of penicillin sensitivity en treated with Trobicin, although penicillin antibody studies were not performed

ive against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

ingle two-gram injection produces peak serum concentrations averaging about 0 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

e: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the ptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any ctive antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for norrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should nstituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found ersensitive to it.

compiled from reports of 14 investigators. **Diognosis was confirmed by cultural identiticotion of *N. gonorrhoeae* on Thayer-tin media in all patients. Criteria for cure: negative culture after at leost 2 days post-treatment in males and at least 7 days post-tment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the w-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined reinfection through odditionol sexuol contacts was likely. Such cases were judged to be reinfections rather than relapses or res. These cases were regarded as non-evaluatable and were not included. JA72 1848-6

in, hematocrit and creatinine cleoronce; elevation of alka-phosphatase, BUN ond SGPT. In single and multiple-dose es in normal volunteers, o reduction in urine output was d. Extensive renal function studies demonstrated no con-t changes indicative of renal toxicity.

age and administration: Keep at 25°C and use within ours after reconstitution with diluent.
e—single 2 gram dose (5 ml) intramuscularly. Patients with rrheol proctitis and patients being re-treoted after failure evious ontibiotic theropy should receive 4 grams (10 ml). In graphic areos where antibiotic resistance is known to be pre-nt, initial treotment with 4 groms (10 ml) intromusculorly is erred.
ole—single 4 gram dose (10 ml) intramuscularly.

supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with o concentration of spectinomycin dihydrochloride pentohydrote equivolent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae.*

Human pharmacology: Rapidly obsorbed after intramuscular injection. A two-gram injection produces peok serum concentrations averoging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations overaging 160 mcg/ml ot two hours with 31 mcg/ml ot 8 hours.

For additional product information, see your Upjohn representative or consult the pockage insert. MED-B-1-S (LWB)

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

(Continued from Page 635)

Watanabe, Haruki, b 34, mc Tohoku U. '59 (Sendai, Japan), limited license '69, 1919 South 7th Avenue, Birmingham, Alabama 35233. Oph.

Watson, Elias Calvin, III, b 40, mc Alabama '65, sb 66, 801 Princeton Avenue, Suite 520, Birmingham, Alabama 35211. D.

Zarzaur, Joseph Anthony, b 42, mc Alabama '70, recip. NBME '71, Park West Medical Clinic, Graysville, Alabama 35073. GP.

Lauderdale County

Eich, Wilbur Foster, III, b 38, mc Tulane '64, recip. Louisiana '67, 412 South Cedar, Florence, Alabama 35630. Pd.

Lee County

Godsil, Raymond Dean, Jr., b 39, mc Northwestern Univ. 64, recip. NBME 71, Medical Arts Center, Opelika, Alabama 36801. Or.

Wright, Emil Francis, Jr., b 36, mc Emory '67, recip. Georgia '71, Medical Arts Center, Opelika, Alabama 36801. Oph.

Limestone County

Paine, Charles Herman, Jr., b 16, mc Emory 41, recip. Georgia 46, Route 1, Lester, Alabama 35647. GP-S.

Montgomery County

Hester, Keith, b 19, mc U. Arkansas '50, recip. Arkansas '59, 750 Washington Avenue, Montgomery, Alabama 36104. Path.

Montgomery, Ronald Kent, b 36, mc Emory '63, recip. Georgia '68, 1722 Pine Street, Montgomery, Alabama 36106. S.

Porter, Charles McGavock, b 35, mc Vanderbilt '61, recip. Tennessee '70, 2900 McGehee Road, Montgomery, Alabama 36111. C.

Morgan County

Cochran, Leon Henry, b 35, mc Univ. Tennessee 61, recip. Tenn. 70, 1201 Somerville Road, S. E., Decatur, Alabama 35601. I.

Talladega County

Barksdale, Larry Houston, b 39, mc Alabama '65, sb 66, Talladega, Alabama 35160. R.

Walker County

Hudson, Alcus Ray, b 43, mc U. Mississippi '70, recip. Mississippi '71, Jackson Clinic, P. O. Box 1389, Jasper, Alabama 35501. GP.

Mayfield, William Cato, Jr., b 45, mc U. Mississippi '70, recip. Mississippi '71, Jackson Clinic, P. O. Box 1389, Jasper, Alabama 35501. GP.

Scarbrough, Daniel McGehee, b 45, mc U. Mississippi '70, recip. Mississippi '71, Jackson Clinic, P. O. Box 1389, Jasper, Alabama 35501. GP.

Wilcox County

Blackmon, Sumpter Dudley, b 43, mc Alabama '69, recip. NBME '71, Broad Street, Camden, Alabama 36726. GP.

MEMBERS DECEASED

Geneva County

Martin, Robert Lester, Jr., Geneva, Alabama, Deceased 8/31/71.

Jefferson County

Goldstein, Ben, Birmingham, Alabama, Deceased 10/23/71.

Mobile County

Burke, Daniel Wilbern, Jr., Mobile, Alabama, Deceased 11/29/71.

St. Clair County

Riser, Arthur Franklin, Pell City, Alabama, Deceased 10/31/71.

Sumter County

Hill, Robert Carl, York, Alabama, Deceased.

Washington County

Blount, William James, Millry, Alabama, Deceased 10/22/71.

CHANGES OF ADDRESS

Baldwin County

Armistead, Sidney D., present Robertsdale to Route 3, Box 561, Daphne, Alabama 36526.

Britton, James W., present Foley to P. O. Box A, Foley, Alabama 36535.

Yancey, Thomas H., present Fairhope to P. O. Drawer 509, Fairhope, Alabama 36532.

(Continued on Page 642)



if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

When irritable colon feels like this



..in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distension and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

g peeper (tree frog, *Hyla crucifer*):
mall amphibian can expand
roat membrane with air until it is
the size of its head.

(Continued from Page 638)

Calhoun County

Brothers, Thomas J., Jr., present Anniston to 411 East 9th Street, Suite A, Anniston, Alabama 36201.

Gantt, James S., present Anniston to 1105 Christine Avenue, Anniston, Alabama 36201.

Clarke County

Henry, Margaret L., present Thomasville to 218 Wilson Avenue, Thomasville, Alabama 36784.

Covington County

Moore, Morgan J., present Andalusia to 601 By-Pass West, P. O. Drawer 370, Andalusia, Alabama 36420.

Cullman County

Bownes, Eugene A., present Cullman to 312 East Arnold Street, Cullman, Alabama 35055.

Crocker, Francis L., Jr., present Cullman to 404 Arnold Street, N. E., Cullman, Alabama 35055.

Etowah County

Burns, James H., present Gadsden to P. O. Box 287, Gadsden, Alabama 35902.

Feist, Fredric W., present Gadsden to 1413 Rainbow Drive, Gadsden, Alabama 35901

McIntyre, Michael W., present Gadsden to 1401 Rainbow Drive, P. O. Box 1667, Gadsden, Alabama 35902.

Peterson, Thomas C., present Gadsden to 525 South 3rd Street, Gadsden, Alabama 35901.

Jackson County

Elmore, Gary S., present Bridgeport to P. O. Box 625, Stevenson, Alabama 35772.

Jefferson County

Briggs, Dick D., Jr., present Birmingham to 1919 - 7th Avenue South, Birmingham, Alabama 35233.

Chapman, Lee B., present Birmingham to 1717 - 11th Avenue South, Suite 503, Birmingham, Alabama 35205.

Campbell, Ernest S., Jr., present Birmingham to 800 Montclair Road, Birmingham Alabama 35213.

Capra, Charles S., present Birmingham to 1529 North 25th Street, Birmingham, Alabama 35234.

Carey, Joshua H., present Birmingham to 1218 Bourbon, New Orleans, Louisiana 70116.

Chenoweth, Beach, present Birmingham to 4156 Glenbrook Drive, Birmingham, Alabama 35213.

Cline, Wade M., present Birmingham to 171 11th Avenue South, Birmingham, Alabam 35205.

Collins, Harry G., present Birmingham to 1413 Cosmos Circle, Birmingham, Alabam 35216.

Diseker, Maude, present Birmingham to 323 Salisbury Road, Birmingham, Alabam 35213.

Frink, Richard J., present Birmingham t 5380 Elvas Avenue, Sacramento, Californi 95819.

Goldstein, Richard P., present Birminghar to 930 Franklin Street, S. E., Huntsvill Alabama 35801.

Hays, John H., present Birmingham to 445 Briarglen Drive, Birmingham, Alabam 35243.

Hodo, John B., present Birmingham to 80 Princeton Avenue, S. W., Suite 224, Bi mingham, Alabama 35211.

Holcomb, Maurice C., Jr., present Irondal to 1675 Montclair Road, Suite 212, Birmin ham, Alabama 35210.

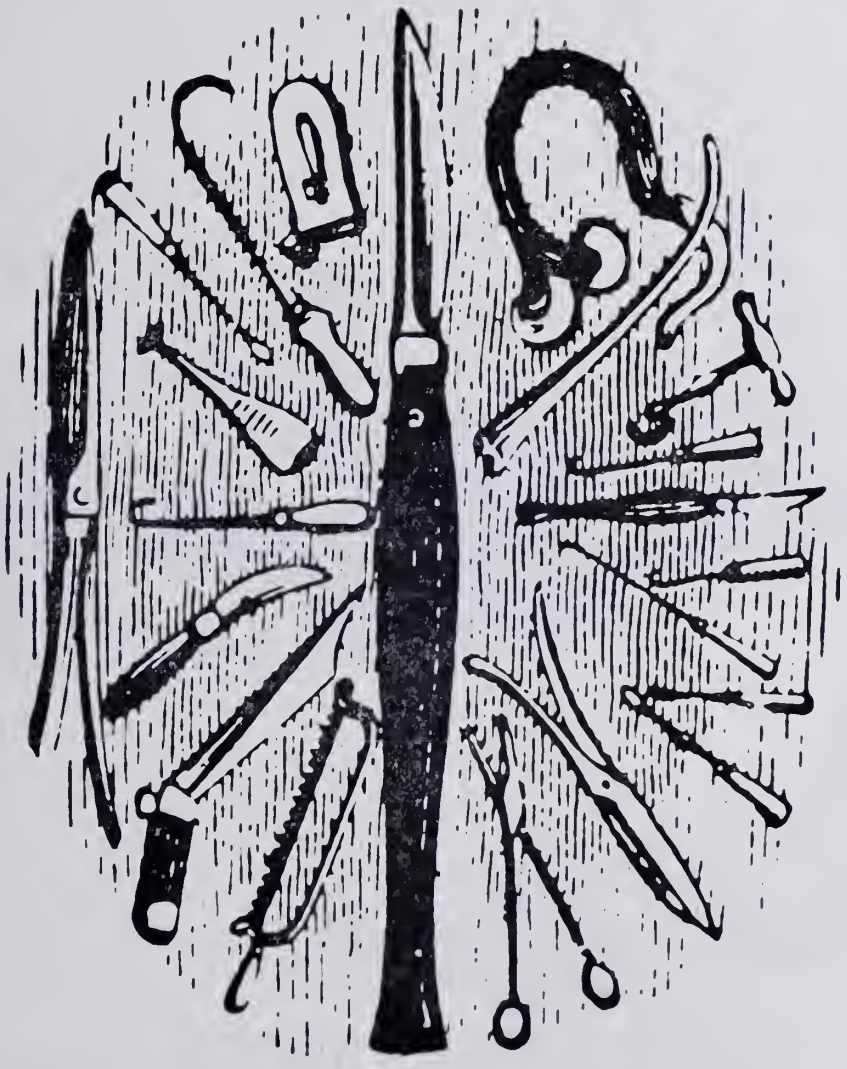
Longino, Luther A., present Birmingham 1 1601 - 6th Avenue South, Birminghar Alabama 35233.

Luketic, Gorazd C., present Birmingham 801 Princeton Avenue, S. W., Suite 62 Birmingham, Alabama 35211.

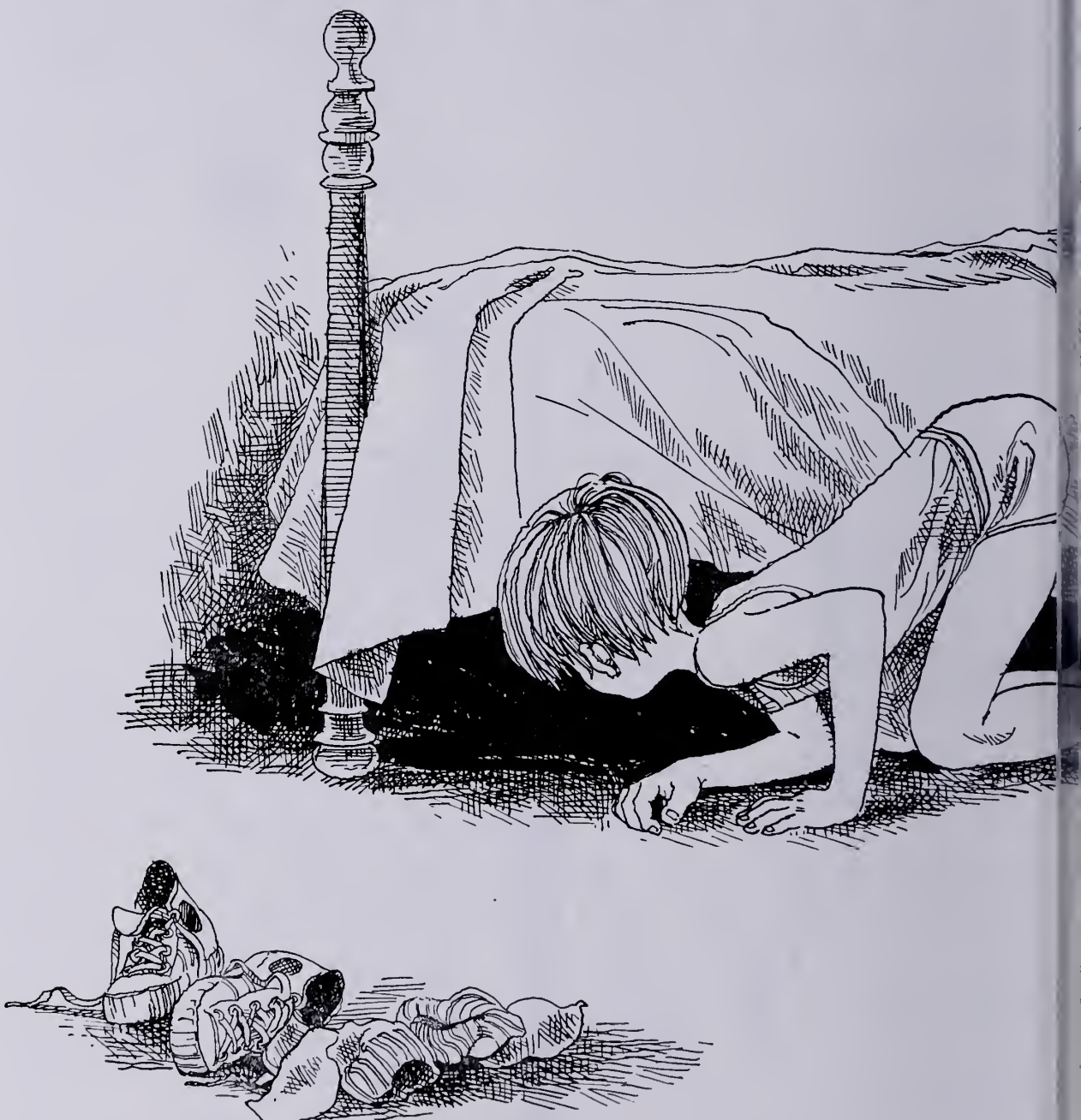
(Continued on Page 646)

In 1852 it was reported that practicing medicine in the southern section of Alabama were "40 regular practitioners, 2 hemeopathists and hydropathists, 3 root doctors and Thompsonians, 3 general quackery and one idio-eclectopathist."

BLUE CROSS-BLUE SHIELD OF ALABAMA



Arthur los



A single-dose, non-staining anthelmi

is pinworms...



with just one non-staining dose of Antiminth (pyrantel pamoate) Oral Suspension.

Highly effective. Active against pinworm...and roundworm.

Non-staining. Doesn't stain teeth or oral mucosa on ingestion. Doesn't stain stools, clothing or linen.

Simple dosage. Single-dose regimen: 1 cc. per 10 lbs. of body weight (1 tsp. per 50 lbs.).

Well-tolerated. Based on pre-introductory studies.

Pleasant-tasting. Easy-to-take, caramel-flavored oral suspension.

Economical. One prescription for the entire family.

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia.

Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.), maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

nt: **new ANTIMINTH®**

(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

ROERIG Pfizer

A division of Pfizer Pharmaceuticals
New York, New York 10017

(Continued from Page 642)

Mears, Thomas W., present Birmingham to 1717 - 11th Avenue South, Suite 503, Birmingham, Alabama 35205.

Miller, A. Lamar, Jr., present Birmingham to c/o Plaza Pharmacy, West Main Street, Dothan, Alabama 36301.

Miller, James A., present Birmingham to 537 St. Charles Avenue, S. W., Birmingham, Alabama 35211.

Pittman, James A., Jr., present Birmingham to Veterans Administration Central Office, Washington, D. C. 20420.

Reeves, Thomas J., present Birmingham to 1919 - 7th Avenue South, Birmingham, Alabama 35233.

Renneker, William C., Jr., present Birmingham to 801 Princeton Avenue, S. W., Suite 624, Birmingham, Alabama 35211.

Rubin, Richard B., present Birmingham to Suite 520, Medical Towers, 1717 - 11th Avenue South, Birmingham, Alabama 35205.

Stewart, Grady C., present Bessemer to 801 Princeton Avenue, S. W., Birmingham, Alabama 35211.

Sullivan, M. Bruce, Jr., present Birmingham to 1717 - 11th Avenue South, Suite 503, Birmingham, Alabama 35205.

Tarpley, William T., present Birmingham to 2632 Mountain Brook Parkway, Birmingham, Alabama 35223.

Toner, Stephen J., present Birmingham to 29 Shalimar Drive, Shalimar, Florida 32579.

Turner, George P., Jr., present Birmingham to 3015 - 7th Avenue South, Birmingham, Alabama 35233.

Weaver, Jerome A., present Birmingham to 5829 Woodson Road, Mission, Kansas 66202.

West, Otus T., present Birmingham to 901 South 15th Street, Suite J, Birmingham, Alabama 35205.

Wilson, George N., present Bessemer to 316 North 17th Street, Bessemer, Alabama 35020.

Yake, Ronald F., present Birmingham to 514 Medical Arts Building, Birmingham, Alabama 35205.

Lauderdale County

Ellis, Bert H., present Florence to 1975 Darby Drive, Apt. C-7, Florence, Alabama 35630.

Lee County

Brown, Morgan W., present Auburn to P. O. Box 1854, Auburn, Alabama 36830.

Russell, William S., present Opelika to 121 North 20th Street, Opelika, Alabama 36801.

Mobile County

Harris, Edward C., Jr., present Mobile to 1761 Springhill Avenue, Mobile, Alabama 36604.

Rutledge, Guy L., Jr., present Mobile to 1761 Springhill Avenue, Mobile, Alabama 36604.

Weldon, Joseph M., present San Antonio, Texas to 603 Vance Road, Huntsville, Alabama 35801.

Montgomery County

Hester, Keith, present Montgomery to 2900 McGehee Road, Montgomery, Alabama 36111.

Karst, Charles, III, present Montgomery to 4485 Atlanta Highway, Montgomery, Alabama 36109.

Penton, John R., Jr., present Montgomery to 703 East Fairview Avenue, Montgomery, Alabama 36106.

Penton, Robert S. B., present Wetumpka to U. S. Veterans Hospital, Ward 40, Tuscaloosa, Alabama 35401.

Waters, Hinton W., Jr., present Montgomery to 1716 Park Place, Montgomery, Alabama 36106.

(Continued on Page 648)



The Bradley Center --- for the problems of living

An all new homelike open psychiatric residence on a lovely five-acre tract, centrally located within the community, providing a comprehensive range of continuous services, including in-patient, day care, and outpatient treatment. Each patient participates in an extensive and intensive treatment program, based almost exclusively upon multiple psychotherapeutic encounters. These include individual psychotherapy, group psychotherapy, the nursing milieu, occupational therapy, recreational therapy, topical small group discussions, and other group activities in the Center, as well as in the community, depending on individual needs and interests. Medications are prescribed when appropriate.

Any individual may be admitted who, in the opinion of the medical staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible family member.

Accredited by the Joint Commission on Accreditation of Hospitals.

Leonard T. Maholick, M. D.
Medical Director

Maj. Gen. (ret.) Howard Snyder
Administrator

THE BRADLEY CENTER, INC.
2000 Sixteenth Avenue
Columbus, Georgia 31901
Area Code 404 324-4882

(Continued from Page 646)

Morgan County

Barrett, Maurice E., present Decatur to 1202 - 13th Avenue, S. E., Decatur, Alabama 35601.

Hamilton, John S., present Decatur to P. O. Box 1415, Decatur, Alabama 35601.

Shelby County

Hall, Harold J., present Columbiana to P. O. Box 1006, Columbiana, Alabama 35051.

Phillips, Harry La Don, present Columbiana to P. O. Box 1006, Columbiana, Alabama 35051.

Sumter County

Norton, Thomas B., present York to Box 146, Gulf Shores, Alabama 36542.

Tallapoosa County

Michaels, Lawrence, present Alexander City to Medical Arts Building, Suite No. 3, Alexander City, Alabama 35010.

Walker County

Noguera, John F., present Sumiton to Parrish Medical Office, Parrish, Alabama 35580.

Olsen, Frank B., present Jasper to 1925 South Arizona Boulevard, Coolidge, Arizona 85228.

MEMBERS TRANSFERRED

Baldwin County

Nichols, Edward T., 301 Hand Avenue, Bay Minette, Alabama 36507, from member Mobile County Medical Society to member Baldwin County Medical Society. S.

Jefferson County

Pittman, Walter G., Lloyd Noland Hospital, Fairfield, Alabama 35064, from member Henry County Medical Society to member Jefferson County Medical Society. U.

Montgomery County

Combs, Robert M., 2119 East South Blvd., Montgomery, Alabama 36111, from member Dallas County Medical Society to member Montgomery County Medical Society. I.

Morgan County

Oliver, Robert K., Courtland Clinic, Courtland, Alabama 35618, from member Lawrence County Medical Society to member Morgan County Medical Society. Pul-HAd.

ADD SPECIALTY

Baldwin County

Nichols, Edward T., 301 Hand Avenue, Bay Minette, Alabama 36507. S.

Jefferson County

Wade, Stanley A., Jr., Lloyd Noland Hospital, Fairfield, Alabama 35064. U. (Resident)

Yake, Ronald F., 514 Medical Arts Building, Birmingham, Alabama 35205. S.

CHANGE OF SPECIALTY

Jefferson County

Caldwell, Harry E., 2124 South 4th Avenue, Birmingham, Alabama 35233. I-S.

Campbell, Ernest S., Jr., 800 Montclair Road, Birmingham, Alabama 35213. S-G.

Carmichael, Daniel E., 944 South 18th Street, Birmingham, Alabama 35205. G.

Collier, James B., 10 Crestview Circle, Birmingham, Alabama 35213. Oph.

Dabbs, Jack M., 652 Lomb Avenue, Birmingham, Alabama 35211. S.

Jackson, David H., 1919 South 7th Avenue, Birmingham, Alabama 35233. I-C.

Johnson, James C., 1909 Laurel Road, Birmingham, Alabama 35216. Pd.

Pitts, William R., 1919 South 7th Avenue, Birmingham, Alabama 35233. P. (Resident)

Reeves, Thomas J., 1919 South 7th Avenue, Birmingham, Alabama 35233. I.

Rose, John W., 810 Princeton Avenue, S. W., Birmingham, Alabama 35213. GP-S-ObG.

Vitek, Jiri J., 1919 South 7th Avenue, Birmingham, Alabama 35233. N-R.

(Continued on Page 653)



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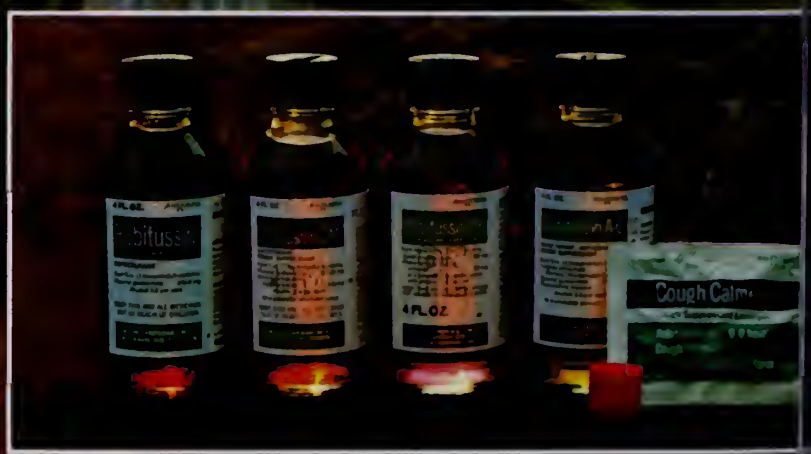
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Ward, John L., 741 Montgomery Drive, Birmingham, Alabama 35213. Path.

Whitehurst, Walter R., 909 South 18th Street, Birmingham, Alabama 35205. NS.

Wilensky, Allan S., 801 Princeton Avenue, S. W., Suite 638, Birmingham, Alabama 35211. C.

Morgan County

Phillips, Edwin J., 1201 Somerville Road, Decatur, Alabama 35601. P.

Tallapoosa County

Gaba, William F., RFD No. 4. Box 74-B, Alexander City, Alabama 35010. R.

CHANGE OF LISTING

Jefferson County

Old Listing: **Hazigeorgiou,** George Panayiotis, 2160 Highland Avenue, South, Birmingham, Alabama 35205.

New Listing: **Hatzigeorgis,** George Panayiotis, 2160 Highland Avenue South, Birmingham, Alabama 35205.

NEW TELEPHONE NUMBERS

Barksdale, L. H., Talladega	362-8111
Bird, T. B., Jefferson	871-6886
Blackmon, S. D., Wilcox	682-4446
Burns, F. M., Houston	794-2658
Campbell, E. S., Jr., Jefferson	591-2565
Campbell, J. E., Clay	396-2142
Clark, W. V., Clay	396-2142
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Godsil, R. D., Jr., Lee	745-6271
Goldstein, R. P., Jefferson	539-8167
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McLaughlin, R. P., Jefferson	252-6121
Miller, A. L., Jr., Jefferson	792-7900
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Parker, Robert, Montgomery	281-2582
Patton, T. H., Jr., Tuscaloosa	553-4550
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Dyke, P. C., Jefferson	592-0081
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Gutierrez-Mazorra, J. F., Jefferson	934-4696
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Kneidel, J. H., Jefferson	785-2121
Kreisberg, R. A., Jefferson	934-4852
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Watson, E. C., III, Jefferson	780-5995
Wright, E. F., Jr., Lee	749-1486
Zarzaur, J. A., Jefferson	674-6462

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Libritabs is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensives, vasodilators and oral anticoagulants, whenever excessive anxiety or emotional tension adversely affects the clinical condition or response to therapy. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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for severe anxiety accompanying congestive heart failure

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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • March, 1972 • No. 9

Office of Publication
19 So. Jackson St. — Montgomery, Ala. 36104
Subscription Price — $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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Warnings: Advise vehicle or machine operators of possible drowsiness. Warn patients of possible additive effects with alcohol and other CNS depressants.

Usage in Pregnancy: In pregnancy, nursing mothers and women who might bear children, weigh potential benefits against hazards. Inhibition of lactation may occur.

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President's Page



Archie E. Thomas, M. D.

There is a good possibility that 1973 will be a fateful year in the history of Alabama Medicine.

Sometime between now and next year decisions will be made which will determine whether responsibility for enforcement of the health and sanitation laws of this State will be vested entirely within the medical profession, or if these vital functions are to become political playthings.

At the moment, at least six different plans have been advanced for restructuring Alabama's systems for administering preventive and clinical health mechanisms. These proposals range all the way from do-nothing-at-all-and-see-where the chips-fly to revolutionary actions to divest the Medical Association of the State of Alabama of its legal status as the State Board of Health.

The doctor's status as "captain of the health team" has never been so strongly threatened in this State. If some who would destroy the present system are successful, the strong voice of Medicine will be reduced to a whisper. Others would so fragment the organizational and health systems that no group or combination of groups can effectively protect the total public interest.

When the Medical Association of the State of Alabama convenes in its 111th Annual Session in the City of Montgomery, April 20-22, the Counsellors and Delegates will bear the responsibility for resolving Medicine's position on this momentous issue.

It behooves those members of county societies who will serve as their colleagues' representatives to this Annual Session to inform themselves completely of the issues and consequences at stake.

Every member who is not urgently involved elsewhere should come to Montgomery to attend the debates. Only then can the voice of Medicine be adequately heard.

Let every Doctor of Medicine remember that he has inherited an exalted position in the society of this State, beloved and trusted, which was established for him by his predecessors in Medicine. We did nothing to establish that proud heritage which has stood so magnificently for almost 200 years.

Let it never be said that we were the guardians of that heritage when it was destroyed.



Archie Thomas, M. D.

President

FDA Hexachlorophene Proposal

Concerning the FDA proposal published in the January 7 Federal Register to restrict the use of hexachlorophene and other antibacterials in skin cleaners and cosmetics, one should bear in mind that it is a proposal subject to revision after interested parties have submitted comments. No action by manufacturers or the public is indicated until the final version of the policy statement is published in the Federal Register.

We feel very strongly that the FDA has over-reacted in their attempt to control the use of hexachlorophene and other antibacterials. FDA Commissioner, Dr. Charles C. Edwards, himself, emphasized that **the FDA is unaware of human toxicity produced by hexachlorophene products under normal conditions** of use. The Pharmacology and Toxicology Committee of the Cosmetic, Toiletry and Fragrance Association recently reviewed the available scientific information and concluded "that topically applied cosmetic products containing hexachlorophene are safe under conditions of normal use". (Scientific Newsletter 71-5 and 6).

The benefits derived from the use of hexachlorophene were grossly underrated. **Staph. epidemics have already broken out in several hospitals where hexachlorophene bathing of the newborn was discontinued.** The consuming public should not be denied the social and medical benefits they derive from its use in topical preparations.

We agree that further investigations on antibacterials are required in the light of recent animal studies. Many are in progress and additional ones are planned. **Since no human toxicity under normal use conditions has ever been reported, it would be proper to await the completion of this work.**

We feel confident that hexachlorophene is a safe product under normal use conditions and that our conviction will be confirmed in these additional studies.

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CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.
Full information available on request.

WARNER-CHILCOTT
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

for the practical generation

Pre-Sate®

(chlorphentermine HCl)



the trend is toward our kind of anorectic

Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
- less CNS stimulation than with d-amphetamine or phenmetrazine

Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
- convenient one-a-day dosage

PR-SP-91-B/W

Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant



What makes 'Deprol' useful for depressed geriatric patients... makes it useful for younger patients as well

- helps ease mild to moderate nonpsychotic depression *and* related anxiety
- helps assure a good night's rest



The middle-aged housewife who can't stop feeling "blue," who worries about losing her attractiveness yet neglects her appearance; reports vague aches and pains, difficulty sleeping, loss of appetite.

INDICATIONS: Useful in the management of depression, both acute (reactive) and chronic; particularly useful in the less severe depressions and where the depression is accompanied by anxiety, insomnia, agitation, or rumination; also useful for management of depression and associated anxiety accompanying or related to organic illnesses.

CONTRAINDICATIONS: Benactyzine hydrochloride: Glaucoma and previous allergic or idiosyncratic reactions to benactyzine hydrochloride or related compounds. **Meprobamate:** Acute intermittent porphyria and allergic or idiosyncratic reactions to meprobamate or related compounds such as carisoprodol, mebutamate, tybamate, carbromal.

WARNINGS: The following information on meprobamate pertains to 'Deprol' (meprobamate + benactyzine hydrochloride): **Meprobamate:** *Drug Dependence:* Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia, slurred speech, vertigo. Carefully supervise dose and amounts prescribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2 weeks) or substitute a short-acting barbiturate, then gradually withdraw. *Potentially Hazardous Tasks:* Driv a motor vehicle or operating machinery. *Additive Effects:* Possible a tive effects between meprobamate, alcohol, and other CNS depressa or psychotropic drugs. *Pregnancy and Lactation:* Safe use not establish weigh potential benefits against potential hazards in pregnancy, nurs mothers, or women of childbearing potential. Animal data at five tir the maximum recommended human dose show reduction in litter due to resorption. Meprobamate appears in umbilical cord blood at near maternal plasma levels, and in breast milk at levels 2-4 times t of maternal plasma. *Children Under Six:* Drug not recommended.

PRECAUTIONS: Meprobamate: To avoid oversedation, use lowest ef tive dose, particularly in elderly and/or debilitated patients. Consider sibility of suicide attempts; dispense least amount of drug feasible at one time. To avoid excess accumulation, use caution in patients with c promised liver or kidney function. Meprobamate may precipitate seizu in epileptics.

ADVERSE REACTIONS: Nausea, dry mouth, other g.i. symptoms; cope; one case each of severe nervousness and loss of power of con tration. The following side effects, which have occurred after administrat of its components alone, have either occurred or might occur when combination is taken. **Benactyzine hydrochloride:** Benactyzine hy chloride alone, particularly in high dosage, may produce dizziness, thou blocking, a sense of depersonalization, aggravation of anxiety, or dis

When mild depression and associated anxiety interfere with living

DEPROL®

(meprobamate 400 mg + benactyzine hydrochloride 1 mg)



The junior executive crushed by his repeated failure to be promoted and anxious about the future; complains to you of listlessness, early-morning awakening.

The young widow whose grief has persisted too long, is pessimistic and fearful about what lies ahead, has lost interest in everything; is preoccupied with vague physical ailments, has crying spells.

bance of sleep patterns, and a subjective feeling of muscle relaxation. There may also be anticholinergic effects such as blurred vision, dryness of mouth, or failure of visual accommodation. Other reported side effects have included gastric distress, allergic response, ataxia, and euphoria. **Meprobamate:** *Central Nervous System:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impairment of visual accommodation, euphoria, overstimulation, paradoxical excitement, fast EEG activity. *Gastrointestinal:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations, tachycardia, various forms of arrhythmia, transient ECG changes, syncope; also, hypotensive crises (including one fatal case). *Allergic or Idiosyncratic:* Usually after 1-4 doses. Milder reactions: itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others: leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe, rare hypersensitivity: hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome; bullous dermatitis (one fatal case after meprobamate plus prednisolone). Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). *Hematologic:* Agranulocytosis and aplastic anemia (rarely fatal), but no causal relationship established. Rarely, thrombocytopenic purpura. *Other:* Exacerbation of porphyric symptoms.

USUAL ADULT DOSAGE: One tablet three or four times daily, which may be increased gradually to six tablets daily and gradually reduced to maintenance levels upon establishment of relief. Doses above six tablets daily are not recommended.

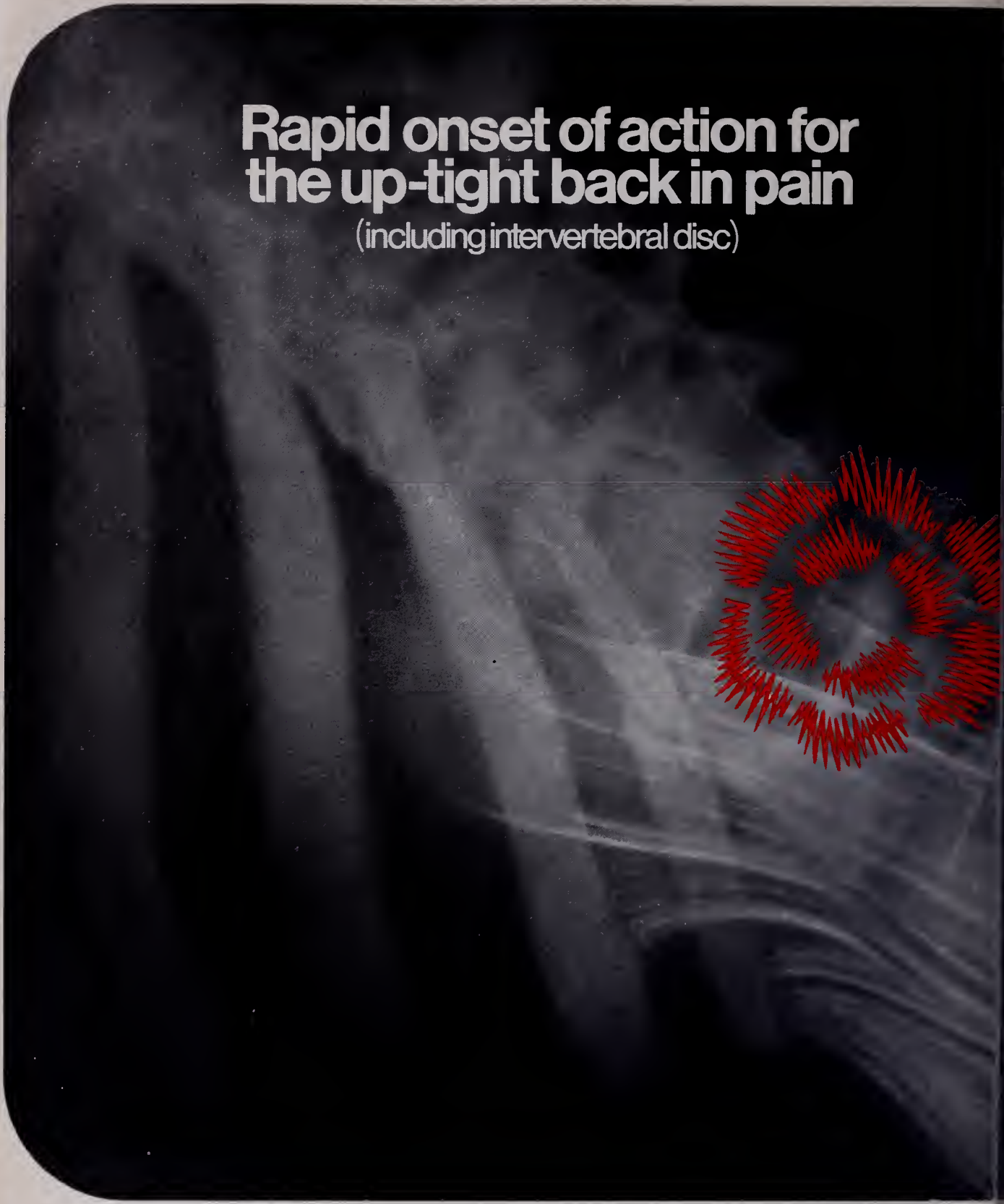
OVERDOSAGE: Overdosage of 'Deprol' (meprobamate + benactyzine hydrochloride) has not differed substantially from meprobamate overdosage: **Meprobamate:** Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption. REV 10/71

Before prescribing, consult package circular or latest PDR information.

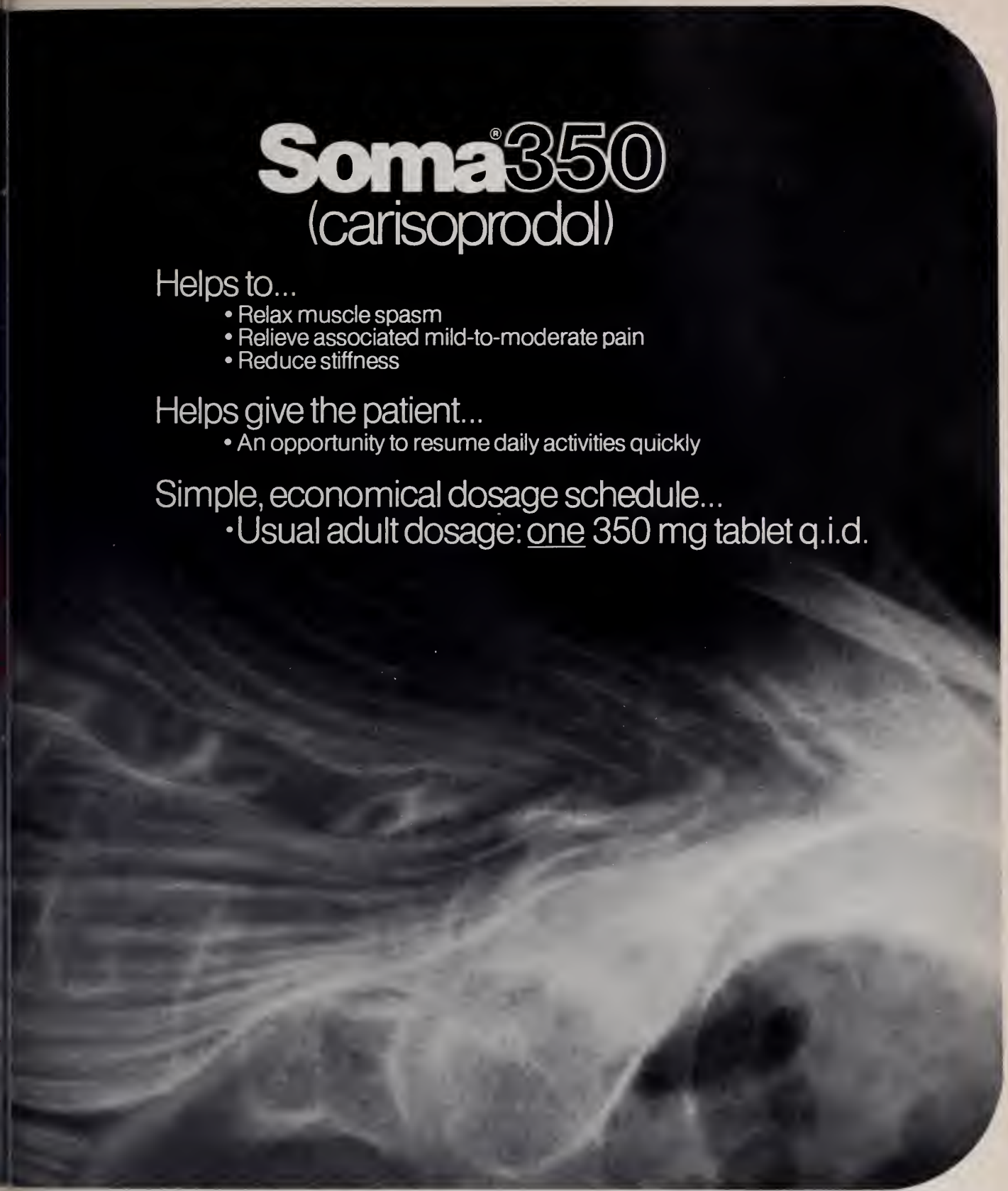
WALLACE PHARMACEUTICALS, Cranbury, N.J. 08512

Rapid onset of action for the up-tight back in pain

(including intervertebral disc)



Indications: For symptomatic relief in conditions characterized by skeletal muscle spasm and mild to moderate pain.
Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to carisoprodol or related compounds such as meprobamate, mebutamate, tybamate.
Warnings: *Idiosyncratic Reactions:* Rarely, first dose has been followed by extreme weakness, transient quadriplegia, dizziness, ataxia, temporary vision loss, diplopia, mydriasis, dysarthria, agitation, euphoria, confusion, disorientation. Symptoms usually subside during the next several hours. Supportive and symptomatic therapy, including hospitalization, may be necessary. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. *Children Unde Five:* Drug not recommended. *Potentially Hazardous Tasks:* Dri ing a motor vehicle or operating machinery. *Additive Effects:* Po sible additive effects between carisoprodol, alcohol, and othe CNS depressants or psychotropic drugs. *Drug Dependence:* Us cautiously in addiction-prone patients.
Precautions: To avoid excess accumulation, use caution in p tients with compromised liver or kidney function.
Adverse Reactions: *Central Nervous System:* Drowsiness, dizz ness, vertigo, ataxia, tremor, agitation, irritability, headache, d pressive reactions, syncope, insomnia. *Allergic or Idiosyncratic* Usually seen after 1-4 doses in patients not previously exposed e.g., rash, erythema multiforme, pruritus, eosinophilia, fixed dru

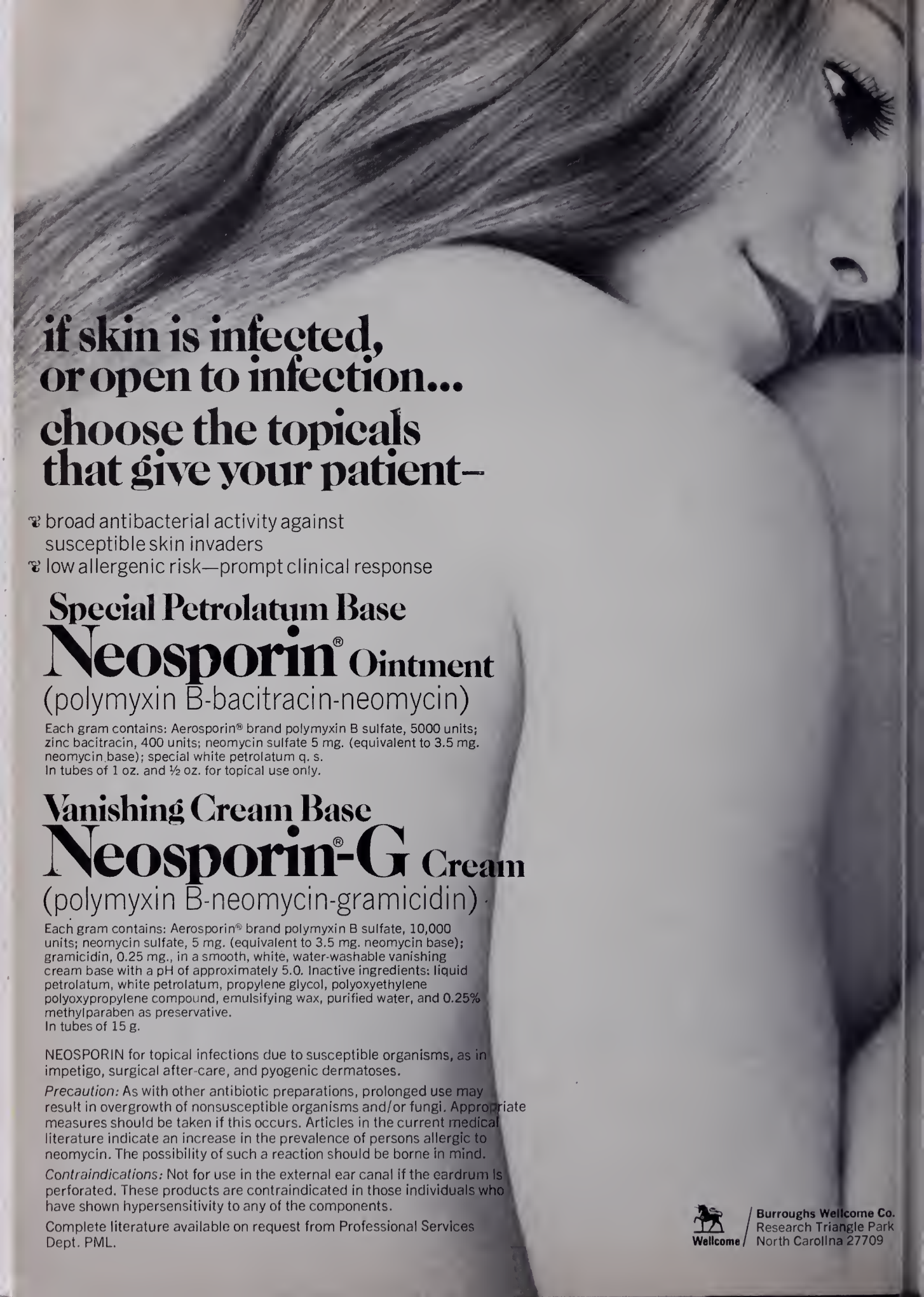


eruption with cross reaction to meprobamate. More severe manifestations: asthma, fever, weakness, dizziness, angioneurotic edema, smarting eyes, hypotension, anaphylactoid shock. Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). *Cardiovascular:* Tachycardia, postural hypotension, facial flushing. *Gastrointestinal:* Nausea, vomiting, hiccup, epigastric distress. *Hematologic:* Leukopenia and pancytopenia (on carisoprodol plus other drugs).

Usual Adult Dosage: One 350 mg tablet three times daily and at bedtime.

Overdosage: Has produced stupor, coma, shock, respiratory depression, and, very rarely, death. Overdosage of carisoprodol plus alcohol or other CNS depressants or psychotropic drugs can be additive. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Carisoprodol is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully with related drug meprobamate. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption. REV 10/71

WALLACE PHARMACEUTICALS / Cranbury, N.J. 08512



if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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North Carolina 27709

The Woman's Auxiliary

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

It All Hangs Together

The convention theme for your Auxiliary tells the story I've been emphasizing all year. County Medical Society-Medical Auxiliary relationships, community service, public relations and membership are all the same bag.

To me the lack of cooperation and communication between county Society and Auxiliary lies in the shyness of Auxiliary members. We don't want to bother busy doctors. We've been brainwashed that the patient comes first. Any M. D. wife knows she comes after the patient, the hospital and the office. We have accepted our place in the importance of matters and wait patiently (most of the time).

I've been telling your wives to stop being so patient. We are in the front lines of community service and public relations. We represent you—as informed or as uninformed as you make us. I've asked them to come to you but I expect this will take time to get them to overcome their shyness and brainwashing of years.

People (members) are essential to promote, protect and produce community service. There is no area of community life not related to physical or mental health—prevention or cure. These are your patients.

You wouldn't leave a nurse, laboratory or X-ray department to their own discretion to take care of your patients between your routine rounds. Don't leave your Auxiliary to do the best they can between routine reports. Every Society officer or chairman, please contact your Auxiliary complement.



Mrs. Gilder L. Wideman

Tell her your goals and how you can help. Remember to tell them you appreciate them. Everyone wants to be wanted!

Frances Wideman
President



Editorial COMMENT

The Bible Says . . .

A group of our favorite physicians—all men who have such wonderful rapport with their patients that they need never fear a malpractice suit—have placed in their waiting room, along with the usual array of magazines, a copy of the Holy Bible.

Through the years patients have found solace in this Book as attested by its dog-eared and battered condition.

Even more interesting are the specific citations written in the patients' own handwriting which have brought special comfort.

Below are just a few:

PROVERBS 3:5-10

"Trust in the Lord with all thine heart; and lean not unto thine own understanding.

"In all thy ways acknowledge him, and he shall direct thy paths.

"Be not wise in thine own eyes: fear the Lord, and depart from evil.

"It shall be health to thy navel, and marrow to thy bones.

"Honor the Lord with thy substance, and with the first fruits of all thine increase:"

"So shall thy barns be filled with plenty, and thy presses shall burst out with new wine.

ISAIAH 40:31

"But they that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run, and not be weary; and they shall walk, and not faint."

ISAIAH 41:10

"Fear thou not; for I am with thee: be not dismayed; for I am thy God: I will strengthen thee; yea, I will help thee; yea, I will uphold thee with the right hand of my righteousness."

PSALMS 27:14

"Wait on the Lord: be of good courage, and he shall strengthen thine heart: wait, I say, on the Lord."

II TIMOTHY 3:15-17

"And that from a child thou hast known the holy scriptures, which are able to make thee wise unto salvation through faith which is in Christ Jesus.

"All scripture is given by inspiration of God, and is profitable for doctrine, for reproof, for correction, for instruction in righteousness:

"That the man of God may be perfect, thoroughly furnished unto all good works.

I CORINTHIANS 15:2-4

"By which also ye are saved, if ye keep in memory what I preached unto you, unless ye have believed in vain.

"For I delivered unto you first of all that which I also received, how that Christ died for our sins according to the scriptures;

And that he was buried, and that he rose again the third day according to the scriptures.

JOHN 3:16

For God so loved the world, that he gave

(Continued on Page 670)

Lofty Hemorrhoids

Mr. H.H., 55, high steel construction worker. For several years, other medications provided little or no relief from pain, burning, and itching of internal and external hemorrhoids. Made worse by much heavy lifting which increased pressure in the intrahemorrhoidal plexus. It wasn't serious enough," so he procrastinated in consulting a doctor. Was also afraid the doctor might find something really serious. Bright blood appearing in the toilet bowl and on toilet tissue scared him into seeing doctor. However, careful history and examination disclosed internal hemorrhoids.



a typical proctological patient



to help relieve the pain, itching, burning associated with this and similar anorectal conditions

prescribe

Anusol-HC®

hemorrhoidal suppositories with hydrocortisone acetate

Each suppository contains hydrocortisone acetate 10 mg, bismuth subgallate 2.25%, bismuth resorcin compound 1.75%, benzyl benzoate 1.2%, Peruvian balsam 1.8%, zinc oxide 11.0%, and boric acid 5.0%, plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

Precaution Prolonged or excessive use of Anusol-HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

Dosage and Administration Anusol-HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol: One suppository in the morning, one at bedtime, and one immediately following each evacuation.

And for long-term patient comfort... recommend Anusol®
hemorrhoidal suppositories
Each suppository contains the ingredients of Anusol-HC without the hydrocortisone.

Warner-Chilcott
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

ANGP-24

(Continued from Page 668)

his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.

ACTS 20:35

"I have shewed you all things, how that so labouring ye ought to support the weak, and to remember the words of the Lord Jesus, how he said, It is more blessed to give than to receive.

ACTS 16:31

And they said, Believe on the Lord Jesus Christ, and thou shalt be saved, and thy house.

LUKE 13:3

I tell you, Nay: but, except ye repent, ye shall all likewise perish.

ROMANS 3:23

For all have sinned, and come short of the glory of God;

ROMANS 6:23

For the wages of sin is death; but the gift of God is eternal life through Jesus Christ our Lord.

MALACHI 3:10

Bring ye all the tithes into the storehouse, that there may be meat in mine house, and prove me now herewith, saith the Lord of hosts, if I will not open you the windows of heaven and pour you out a blessing, that there shall not be room enough to receive it.

The Liability Insurance Program

Many inquiries have been received in recent weeks concerning progress being made in this Association's quest for a fair and equitable liability insurance program. While it is possible that negotiations may be culminated before this editorial appears in print, it appears reasonable to assume that more time will be consumed before a program acceptable to all parties can be effected.

Members of this Association received a questionnaire several months ago in which they were asked to express their views on an Association-sponsored plan which would guarantee:

1. Eligibility to all qualified members,
2. Renewability for a minimum of five years,
3. Agreed rates for three years,
4. Profit-sharing incentives,
5. Contribution clauses to minimize the degree of subsidy by the group,
6. Broadened coverages, and
7. Protection available to five million dollars.

All of the above are features which are not available to Alabama physicians on the current insurance market.

Member response to the questionnaire was overwhelming, probably the largest volume of replies to an inquiry of this type ever recorded. However, actuaries employed by the underwriters are not satisfied and are seeking additional data. For instance, answers to the questionnaire did not clearly indicate how many respondents are in the private practice of medicine. Nor could it be ascertained the approximate number of members who would participate in the plan at the outset.

When all of the information desired by the actuaries is supplied, an answer to whether a MASA-sponsored liability insurance program will be available.

In the meantime, this Association will work to accomplish its joint responsibilities under such a program, among which are:

1. Seek legislative reform.
2. Research alternative methods of resolving disputes.
3. Promptly settle all justified claims to enhance the image of the local medical society.
4. Resist unjustified claims to prevent "bad precedence."
5. Work towards the improvement of the image of the medical profession by supporting an ethics committee and a claim reveiw function.
6. Publish aids to better business and public relations practices.
7. Produce special education programs aimed at better understanding.
8. Increase the control and discipline of local societies over its members, and require a high level of participation, and
9. Keep membership apprised of types and patterns of current claims.



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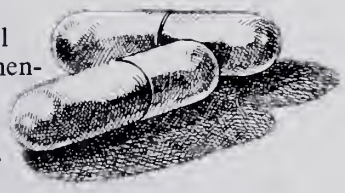
Because you practice medicine in the Cotton State...



You carry one of the heaviest patient loads in the country. Since this may include a number of patients with gastritis and duodenitis... you should know more about Librax®

Helps reduce anxiety-related G.I. symptoms

A patient may blame his attacks of gastritis or duodenitis on "something he ate" but contributing factors may be his job, marital problems, financial worries or some other unmentioned source of stress and excessive anxiety that exacerbated the condition. Whether it is "something he ate" or "something eating him," adjunctive Librax can help. Librax offers both the antianxiety action of Librium® (chlordiazepoxide HCl), that can help relieve excessive anxiety, and the dependable anticholinergic action of Quarzan® (clidinium Br), that can help reduce gastrointestinal hypermotility and hypersecretion.



Patient-oriented dosage — up to 8 capsules daily in divided doses

For optimal response, dosage can be adjusted to suit patient needs—1 or 2 capsules, 3 or 4 times a day.

To help relieve anxiety-linked symptoms in gastritis and duodenitis

adjunctive Librax®

ROCHE

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

ALAPAC Turns Spotlight On State Legislature

With the launching pad for legislative attacks on medicine moved from Washington to Montgomery, at least temporarily, the emphasis for ALAPAC's annual luncheon will make a corresponding swing.

The event will take place at the Jefferson Davis Hotel, Montgomery, at 12:30 p. m. Friday, 21 April 1972, a feature of the annual meeting of the Medical Association of the State of Alabama, and the speaker will be State Senator Roland Cooper, who last year was presented ALAPAC's plaque of appreciation for his "consistent support of legislation to safeguard the health and welfare of the citizens of this State."



Sen. Roland Cooper

There will be two recipients of this year's plaques, a stalwart in the defense of medicine from each house of the Legislature:—State Senator James S. Clark, Eufaula, and State Representative David E. Cauthen, Decatur. And again this year the presentation will be made by Dr. John M. Chenault, chairman of MASA's Board of Censors.

As is customary, invitations to sit at the speakers' tables have been issued to the Governor of Alabama, the Lieutenant Governor, the Speaker of the House of Representatives, and to every member of the ten-man congressional representation. Early acceptances indicate a larger-than-usual attendance.

The speaker will be introduced by Dr. A. E. Thomas, Montgomery, outgoing president of the Medical Association of the State, and the incoming president, Dr. Frank M. Phillippi, Jr., Brewton, a former member of ALAPAC's Board of Directors, will have a part in the program.

The invocation will be by the Rev. Mark E. Waldo, rector, Episcopal Church of the Ascension, Montgomery.

Presiding will be Dr. Grover C. Murchison, Jr., Montgomery, chairman of ALAPAC's Board of Directors, and all members of the board are expected to be seated at the speakers' table, along with other notables.

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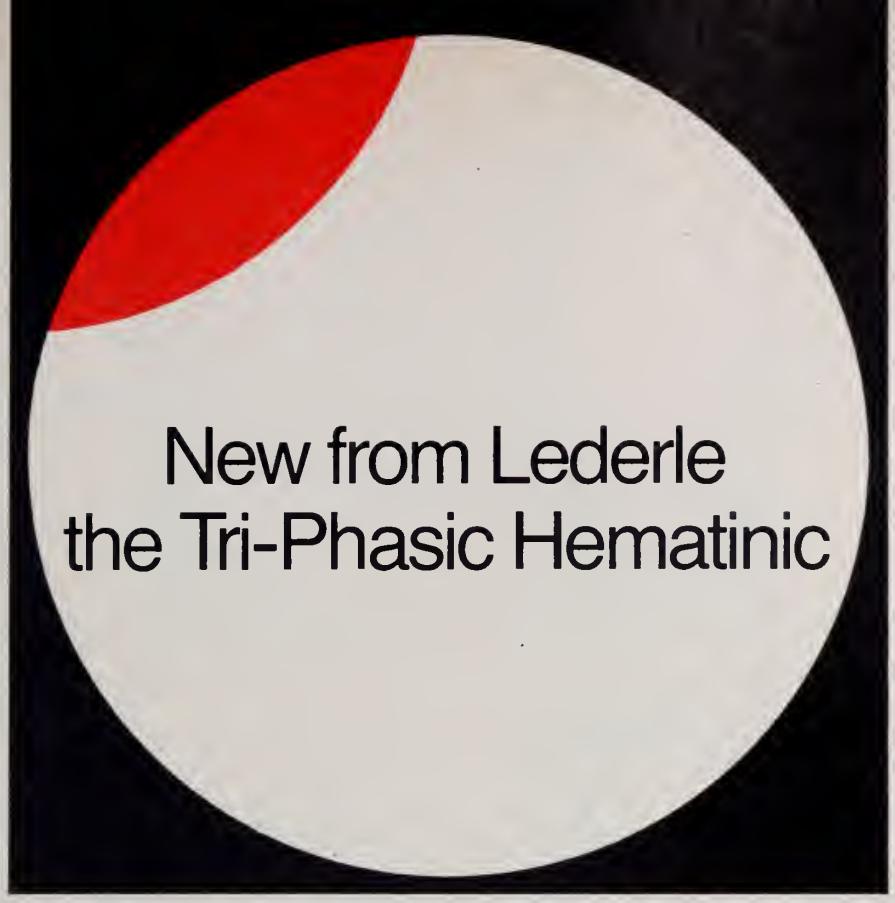
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—Sir William Osler, 1909

These Thirteen Doctors Tennis Enthusiasts



TENNIS PLAYERS ALL.—Top row, from left: Dr. Givhan, Dr. Draughon, Dr. Odom, Dr. Chambless, Dr. Poteet, Dr. Williams, Dr. Kimbrough . . . Bottom row: Dr. Pickering, Dr. Evans, Dr. Jones, Dr. Webb, Dr. Praytor, Dr. Hutchinson.

Horse-racing may be the "sport of kings," but tennis has been the "royal game" from the days of antiquity right up into the mid-20th century. Sweden's King Gustavus V was 92 years old when he died in 1950, not many months away from the royal tennis court.

Henry VIII, who resorted to the ax to rid himself of two of his wives, was quite a devotee to tennis and is said to have built the court at Hampton Court Palace. Louis XIV was another enthusiast. And Henri IV so popularized the game that it was said there were "more tennis-players in Paris than drunkards in England."

Four different times in a span of two centuries in France, the game was taboo for priests.

"Who's for tennis?" is a challenging question familiar for generations wherever there was a happy gathering of the young and the not-so-young. It may be heard among a surprisingly large number of Alabama doctors, including no less than a "baker's dozen" in Montgomery.

The thirteen, alphabetically, with their age and specialty:

1) Dr. William House Chambless, 43, Surgery.

2) Dr. Robert Lee Draughon, Jr., 50, Radiology.

3) Dr. Jack Parmer Evans, 37, Internal Medicine.

4) Dr. Edgar Gilmore Givhan II, 36, Internal Medicine.

5) Dr. Henry Hamilton Hutchinson, 52, Internal Medicine.

6) Dr. John Allen Jones, Jr., 57, OALR.

7) Dr. John Gordy Kimbrough, 43, Radiology.

8) Dr. Shepherd Albert Odom, 32, General Practice.

9) Dr. John Milton Pickering, 44, Radiology.

10) Dr. James Edward Poteet, 36, General Practice.

11) Dr. Hugh Bazelleel Praytor, Jr., 49, Dermatology.

12) Dr. John Walter Webb, Jr., 51, Internal Medicine.

13) Dr. Thomas Harris Williams, Jr., 52, Urology.

There may be significance in the fact that four specialties are represented by four of the tennis-playing thirteen, four are in internal medicine, three in radiology, and two in general practice.

A grammar-school boy who went into tennis because he liked the looks of a Country Club trophy offered that year by a local jeweler, who won the trophy two successive years and so came into permanent possession of it, is alphabetically No. 1 in the foregoing thirteen.

William House Chambless was born in Montgomery 5 January 1929, which makes him 43. He went through Cloverdale and Lanier, Auburn and Emory to his M. D., subsequently serving in the Navy, interning, marrying Billie Ruth Tyus of Birmingham, and today of their three daughters, the eldest is a Lanier cheerleader, and the two younger, 13 and 11 respectively, have won tennis honors in their own right.

Robert Lee Draughon, Jr., who will be 52 about one month from now (10 April), was born in Macon, Georgia, but has lived in Montgomery most of his life. He was 17 before the ping of racquet strings on a tennis ball first drew him to the court. It was during his army service that he attended junior colleges in Texas and Oklahoma, going on to the University of Alabama, first for his B. S. and then his M. D. degrees.

Dr. Draughon was in general practice in Montgomery for ten years before returning to Birmingham for a three-year residency in radiology, home to Montgomery again in 1967. He has a 19-year-old daughter, Kitty, and he is married to the former Frances Holding of Montgomery.

Jack Parmer Evans, born in New Orleans, La., 37 years ago on the 27th of last month, was another early tennis enthusiast, starting at the age of 11, and in 1952, teamed with Bill Brewbaker, Jr., won the high school doubles championship at Lanier. He finished at Vanderbilt, with his baccalaureate in 1956, his M. D. in '59.

Dr. Evans is married to the former Mary Lou Abell of Glasgow, Kentucky, and there are two children: Susan, 9; and Jack, Jr., 7.

Edgar Gilmore Givhan II will not be 37 until next August 6th. Born in Montevallo, it was inevitable that he first tackled tennis on the well tended clay courts of Alabama College. Those courts are now a thing of the past, he admits regretfully. He played little in his pre-med college days, but resumed with renewed enthusiasm in medical school at St. Louis's Washington University. Someone heard him complain recently that time "makes one painfully aware of deteriorating agility and reaction speed."

Dr. Givhan is married to the former Cornelia Bear of Montgomery and there are five children: Edgar III, 13; Fred, 12; Will, 11; Cornelia, 10; Scott, 5. And all but the kindergarten candidate play tennis!

If life really does begin at 40, then Dr.

(Continued on Page 682)

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(Continued from Page 680)

Henry Hamilton Hutchinson, already the father of six, was only 6 (or 46, by the old calendar) when he first tried his hand at tennis six years ago! Born in Montgomery 7 August 1919, "Ham" (as his intimates call him) attended Edgewood Prep in Connecticut before returning to the University of Alabama for his B. S. degree and two years of medicine. He was graduated from Washington University with his M. D. degree in 1944, in the same month of September that he was married to Laura Thornton, also of Montgomery.

World War II was at the peak of its fury, and Dr. Hutchinson went immediately into the Navy, serving in the Pacific, in the Philippines, and actually interned in service. A year's residency in Kentucky Baptist Hospital and Louisville General was sandwiched between the Navy and his return to Montgomery in 1949. Four years after that came a return to the Navy, a year divided between Miami and New York.

Just for the record, the Hutchinsons' six children are: HHH, III, known as "Hank," an Army lieutenant whose duty tour will end about the time this article is published; Kate (now Mrs. Henry Barnett, whose husband is a law student at Emory); Clay, an Emory senior, at the moment an applicant for the Navy OCS; Laura, sophomore at Alabama; Ruthie, sophomore at Jeff Davis High; and Mary, in the 9th grade at Trinity Academy.

Tennis is not listed as the No. 1 hobby of the No. 6 doctor in this array of enthusiasts; but its alliterative partner, Travel, is. That secret (along with his complete biography) was out last July when Dr. John Allen Jones, Jr., was the senior subject of the Journal's Fathers-and-Sons-in-Medicine article. However, as one might suspect of this dean of the baker's dozen tennis enthusiasts (who will be 58 on May 8th), he finds more time for tennis than travel. Incidentally his likeness, which appears with the other twelve accompanying this article, was "struck" last summer amid the ancient ruins of Athens, Greece.

John Gordy Kimbrough, M. D., was also in his 40's when he first tried tennis, two years ago. Born at historic St. Stephens, which in 1817 became Alabama's first capital, this future Montgomery radiologist went first to Marion Institute and then to the University for his B. S. and M. D. degrees. He interned at Tripler Army Hospital in Hawaii.

Dr. Kimbrough, who will be celebrating his 19th wedding anniversary in this month of March, might get some tennis pointers from the former Ouita Beech, also of St. Stephens, who became Mrs. John G. Kimbrough in 1953. She had been playing tennis some years before her husband began.

The Kimbroughs have four children: Susan, 16 this month; Sally, 13; Johnny, Jr., 10 next month; and Sigrid, 8.

Dr. Kimbrough, by the way, is a Kiwanian.

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Albert Odom might not seem so young. But at 32 he is the undisputed junior of the tennis-playing thirteen, born in Barnesville, Georgia, 22 August 1939. His family moved to Alexander City when he was 11. On a chemistry scholarship he went two years to Georgia Tech, transferring to Auburn, from which he was graduated with a degree in Industrial Engineering. He started playing tennis at Tech. At Auburn he ventured into intra-school tournaments. And with excellent courts at Alabama, tennis provided a fine outlet for the tensions of the medical classroom.

Dr. Odom is married to the former Cynthia Ann Connor, Birmingham, and they have two daughters: Kimberly, 4, and Amy, 1. They have lived in Montgomery a year.

Subject No. 9 may or may not have been named for the famous English poet who died 398 years ago, but if you total the ages of the doctors listed here and divide by 13, you'll get 44, which is the age of John Milton Pickering, M. D., born in Selma 3 October 1927.

With B. S. and M. D. degrees from Alabama, Dr. Pickering interned at Lloyd Noland, Fairfield, followed by three years residency, the first at Methodist Hospital, Indianapolis, and two in Birmingham. Married to the former Barbara Lacey, Birmingham, there are three children: David Morrow, 16; John Mark, 13; and Elizabeth Lacey, 11.

Dr. Pickering had played tennis as a boy, but resumed it only three years ago after a lapse of 20 years.

From Montgomery, it's "way up north" to Pearisburg, Virginia, where James Edward Poteet, M. D., was born, just 36 years before this piece is published (10 March 1936). With his M. D. from the Medical College of Virginia, he interned at the Medical Center, Columbus, Ga., went into the Air Force and was sent as a flight surgeon to Maxwell AFB.

Fifty miles farther west he met and married Miss Peggy Gantt, Selma. Their first born was a son, Jim, Jr., now 13, but their other three are daughters: Ann, 11; Mary, 9; Laura, 8. Dr. Poteet was in his 30's before tennis attracted him.

Hugh Bazelleel Praytor, Jr., M. D., was born in Trussville, Ala., 15 February 1923. He has his A. B. and M. D. degrees from Alabama, graduating in 1946 in the first UAB Class. An internship at Duke was followed by a residency in dermatology at Jefferson Hillman. Air Force service put him at Maxwell from 1950 to 1952. Tennis for him dates from his high school days.

Mrs. Praytor is the former Katherine Cox of Boaz, Ala., and there are two children: Linda, who will be 17 this month; and David, 15.

The Rotary directory lists tennis as one of the two hobbies of John Walter Webb, Jr., M. D., the son of a onetime executive of the Alabama Journal, in the days when it was owned by the late Frederick I. Thompson. Born in Birmingham 18 September 1920, the future internist earned his B. S. degree from The Citadel, and his M. D. from UAB Medical College. Dr. Webb is married to the former Cecile Morgan and there are three children: Jack, Maryla, and Murray.

When the weather's wrong for tennis and the season's right for hunting, and when he can get away, Dr. Webb is apt to be in the wilds of Alabama, his quarry whatever the date on the calendar indicates.

Thirteenth alphabetically of Montgomery doctors, apt to be found on the tennis courts when the weather smiles and the waiting rooms aren't crowded, is Thomas Harris Williams, Jr., son of a distinguished boys' school owner and teacher of just a few years ago.

Born in Wetumpka 12 November 1919, "Tommy" has been a tennis enthusiast since prep-school days at Marion Institute. He earned his A. B. degree from Alabama, his M. D. from Vanderbilt, interning at University of Chicago clinics. His residency at the University of Iowa proved doubly rewarding, for it was there he met Julie Paul, destined to become Mrs. Thomas H. Williams, Jr. There are five Williams children.

DEATHS

WILSON, Frank Cunningham, M. D.—Dr. Wilson, 79, for many years chief of surgery at St. Vincent's Hospital, Birmingham, died 26 January 1972. Graveside services were held the following afternoon at Wilson Chapel Cemetery, in Roebuck. Survivors include his widow, the former Emily Bland Symington of Baltimore; a daughter, Mrs. W. D. Tynes, Jr.; four sons, Drs. Frank C. Wilson, Jr., and Thomas A. S. Wilson, William W. S. Wilson and J. R. Bland Wilson; two sisters, Mrs. Rosa Major (Arthur L.) and Mrs. Sara McGruder (Thomas V.), and 16 grandchildren. Dr. Wilson, a past president of the Southern Surgical Association and of the Medical Association of the State of Alabama (1950), received his baccalaureate degree from Virginia Military Institute, 1912, and his M. D. from Tulane Medical School, 1920; and served his residency at Union Memorial Hospital, Baltimore. He was a former associate professor at the University of Alabama Medical School.

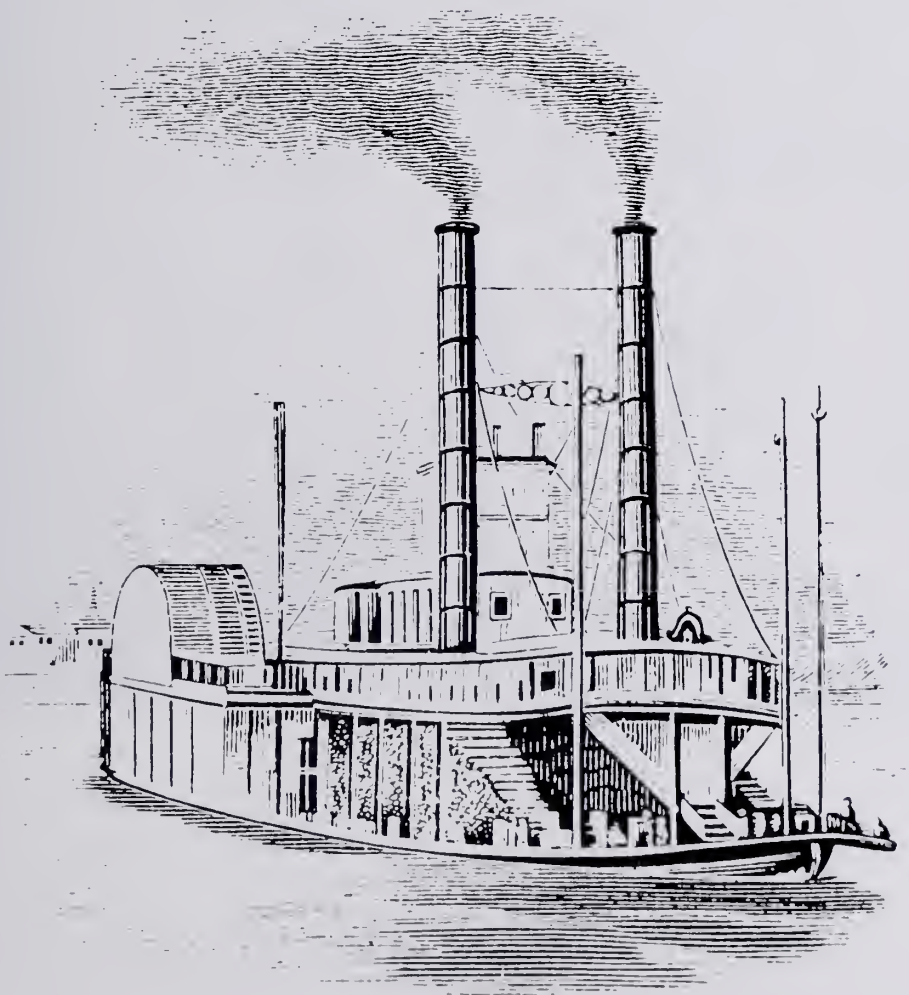
LAVENDER, Claude Wilson, M. D.—Dr. Lavender, 57E, died 31 December 1971. Funeral and burial were held at Hartselle, Ala., where he had been in general practice for ten years before going to Baylor in Texas for a two-year residency in urology before moving to Decatur . . . Survivors include his widow, the former Margie Miles of Crowley, Louisiana; a daughter, Mrs. Robert Hunter, Jr., of Decatur; two sons, Claude, Jr., and Wesley Miles Lavender, Decatur; two grandchildren, Wendy Lavender and Robert Hunter III; his mother, Mrs. C. B. Lavender, Hartselle; three brothers, Dr. Belton Neel Lavender, Albertville; Robert Lavender, Madison, Ala.; and William Lavender, Riverside, California. . . Dr. Lavender was born in Geiger, Ala., in 1915, was graduated from Fairfield High School, earned a degree in Pharmacy from Howard College (now Samford), took his two-year pre-med work at the University of Alabama, and earned his M. D. degree from Northwestern in 1941.

WOODRUFF, Gerald Ginness, Sr., M. D.—Dr. Woodruff, 77, distinguished Alabama physician-surgeon, who in 1970 qualified for membership in MASA's 50-Year Club, died 2 February 1972 in Anniston. Survivors include the widow, the former Flora Campbell of Columbia, Alabama; a daughter, Jane (Woodruff) Lucas, wife of a Charlotte, North Carolina pediatrician; two sons, the Rev. Roy Woodruff, Baptist minister, currently director of Pastoral Care at Bryce Hospital, Tuscaloosa; and Gerald G. Woodruff, Jr., M. D., Anniston pediatrician; and eight grandchildren. Dr. Woodruff, Sr., was a veteran of both World Wars, coming out of the latter with the rank of colonel and wearing both the French Croix de Guerre and the Legion of Honor. In December, 1957, he was honored by his community with a "Dr. Woodruff Appreciation Day," and in December, 1969, was the senior subject of a Journal's Fathers-and-Sons in Medicine article. Incidentally, in 1948, Mrs. Woodruff served as the 21st president of WAMASA. Funeral for Dr. Woodruff was held on Saturday, 5 February, from the Parker Memorial Baptist Church and burial was in Highland Cemetery, Anniston.

JETER, James Neal, M. D.—Dr. Jeter, 54, a Florence surgeon for twenty years, died 18 January 1972. Dr. Jeter's wife, the former Carolyn Robertson of Indiana, died in January, 1971. Survivors include four daughters, Mrs. Susan Ellis, Atlanta; Mrs. Barbara Blackwood, High Point, North Carolina; Mrs. Nancy Spry, Tokyo, Japan; Miss Kelley Jeter, Florence; one son, James N. Jeter, Jr., also of Florence; his mother, Mrs. Viola Jeter, Lawrenceburg, Tennessee; a brother, Dr. William C. Jeter, Lawrenceburg; a sister, Mrs. Frances McDonnell. Florence; and three grandchildren. Funeral and burial were in Florence. Born in Wayne County, Tennessee in 1918, Dr. Jeter was graduated in medicine from the University of Tennessee School of Medicine, Memphis, in 1940. He moved to Florence in 1952 where he has practiced in general surgery since.

Alabama's first meeting of a Medical Society was held at Mobile in 1847. Physicians from the northern section of the State probably traveled by horseback or stagecoach to Tuscaloosa, then by riverboat to Mobile.

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Up on the Tennessee River, where it dips deeply into Alabama, is what is modestly known as a "cabin," enclosing tools of the enthusiastic hobbies of an Alabama doctor:—woodcrafting implements, fishing paraphernalia, and occasionally (when he forgets to take them out of his car) a bag of golf clubs.

James Boyce Wiley was born across that river and across the State line, in Tennessee, on Saturday, 7 July 1906, earning his baccalaureate degree from the University of Tennessee, Knoxville, and in 1932 his M. D. from the University of Tennessee Medical School in Memphis.

Following his internship in Tampa Municipal Hospital, Tampa, Florida, he moved to Decatur, in Morgan County, where he has

(Continued on Page 689)



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(Continued from Page 686)

practiced medicine and general surgery since.

Dr. Wiley is married to the former Ethel Harrison of Birmingham, and three children were born to them: two daughters and a son, the latter following his father into medicine.

Semi-retirement affords Dr. Wiley, a founder and part owner of the 80-bed Baugh-Wiley-Smith Hospital, not only time to wet a hook and spend hours at his lathes, but he has lately resumed golf, which he abandoned some years ago because of the pressure of medical responsibilities.

The junior James Boyce Wiley was born in the North Alabama town named for the naval hero of the War of 1812, on Sunday, 21 March 1937. And remembering the patriotic exclamation of Stephen Decatur ("My country! May she ever be right! But, right or wrong . . . my country!") one isn't surprised to find young Dr. James Boyce Wiley, Jr., decorated for more than 100 hours of combat flight in a helicopter over the enemy-held jungles of South Vietnam. He was a flight surgeon attached to the First Air Cavalry.

To go back a few years, he took his premed work at Vanderbilt but, like his dad, he went to the University of Tennessee Medical School for his M. D. degree, which he earned in 1962. After internship and a residency in general surgery in Memphis, and his tour of military duty, he entered general practice in his native town.

The junior Dr. Wiley is married to the former Hilton Hagler and they have one son, Hagler Wiley. Hobbies are golf and fishing.

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of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 41 March, 1972 Number 9

Operations On The Biliary Tract For Benign Disease

(At University Hospital and Veterans Hospital From 1 October, 1967 to 1 October, 1970.)

Roderick G. Johnson, M. D.

Alexander City, Alabama

The purpose of this paper is to present our experience at University Hospital and Birmingham Veterans Hospital with operations on the biliary tract for benign disease from 1 October, 1967 to 1 October, 1970. Also we will describe how we manage the patient with acute cholecystitis.

Though they sometimes disagree on the treatment of asymptomatic gallstones, both internists and surgeons advocate cholecystectomy for symptomatic stones. Cholecystectomy is one of the most common and generally straight-forward and uncontroversial operations. However, the mortality rate is around one per cent and injury to the common duct can be a grave complication. Because biliary tract disease is so common and is associated with significant hazards, it seems worthwhile to review our experience with this disease even though there are already many detailed reports in the literature.

During the three years there were 361 operations on the biliary tract, 75 at Veterans Hospital and 286 at University Hospital. Most patients had cholecystectomy for symptomatic gallstones. The table summarizes the operations and the results.

I. Elective cholecystectomy for chronic cholecystitis and gallstones.

These were patients who were generally asymptomatic at the time of surgery. There were 283 patients in this category. Most of them had symptoms of gallstones. Many of them were admitted to the hospital with acute cholecystitis and had surgery two or three days later when their symptoms subsided, as they do in most patients with acute cholecystitis. The average age of these patients was 49 years, the age range 19 to 78 years. The ratio of females to males was two to one. Stones were demonstrated in most of these patients by oral cholecystogram or there was non visualization of the gallbladder. The pre operative diagnosis was highly accurate.

Cholecystectomy without common duct exploration was done in 214 patients. Two patients had completely normal gallbladders without stones, and four had chronic cholecystitis without stones. All other patients had

OPERATIONS ON THE BILIARY TRACT FOR BENIGN DISEASE AT UNIVERSITY HOSPITAL AND VETERANS HOSPITAL IN BIRMINGHAM 1 OCTOBER, 1967 TO 1 OCTOBER, 1970

		NUMBER	DEATHS	PERCENT
I	Elective Cholecystectomy			
	Without Choledochotomy	214	5	2.3
	With Choledochotomy	69	2	2.9
II	Emergency Cholecystectomy			
	Without Choledochotomy	24	0	0
	With Choledochotomy	8	1	12
III	Incidental Cholecystectomy	25	4	16
IV	Cholecystostomy	10	2	20
V	Cholecystectomy for Trauma	11	3	27
	Total	361		

gallstones. Primary carcinoma of the gallbladder was a surprise finding in two patients who also had stones. Operative cholangiography was done in 35 per cent of these patients showing a normal biliary tract in every case. There were five deaths (2.3%) which are summarized below.

1. A 65 year old woman had a history of a 35 pound weight loss and gallstones. At surgery gallstones were found and an uncomplicated cholecystectomy was done. No other disease was found. She developed generalized bleeding and died on the third day. Autopsy revealed generalized necrotizing vasculitis compatible with polyarteritis nodosa.

2. A 56 year old man who was a very heavy smoker had mild symptoms of gallstones. The cholecystectomy was uncomplicated but the patient had an acute myocardial infarction and died on the third day.

3. A 64 year old male had a cholecystostomy for acute cholecystitis eight years before. He continued to have mild symptoms of chronic cholecystitis. The cholecystectomy was uncomplicated, but the patient had persistent fever and died suddenly and unexpectedly on the tenth day. Autopsy revealed an absess in the gallbladder bed.

4. A 38 year old male had the dumping syndrome following gastrectomy several years before. He had abdominal pain compatible with gallbladder disease and a questionable filling defect in the gallbladder. At surgery the gallbladder was normal, but was removed. The patient died suddenly in the recovery room of unknown cause. Autopsy showed microscopic pancreatitis which did not explain the death.

5. A 63 year old man was explored for supposed obstructive jaundice. There were stones in the gallbladder but the common duct appeared normal and an operative cholangiogram was normal. A liver biopsy was interpreted as severe toxic hepatitis. The gallbladder was removed without difficulty. The patient died two weeks later with severe liver and kidney failure.

There were 11 other less severe complications (5%). One of these occurred during an attempt at operative cholangiography when the catheter perforated the posterior wall of the common duct. In another patient the ileum was torn by traction and a portion of it resected. Then 15 days later another operation was necessary because of small bowel obstruction.

There were three wound infections and one of these patients developed an incisional hernia. One unusual patient had sudden, extremely severe abdominal pain six days after uncomplicated cholecystectomy and was explored. The abdomen was normal.

One patient had a subphrenic absess which was drained. Two patients were thought to have had pulmonary emboli and one patient had thrombophlebitis of the leg. Finally, one patient had repeated small bowel obstruction following routine cholecystectomy. At the third exploration a carcinoma of the duodenum was found.

Elective cholecystectomy with common duct exploration was done in 69 patients, 24 per cent of elective cholecystectomies. These patients were from 17 to 83 years old, average 52 years. Operative cholangiography before exploration of the duct was not generally done. The usual indications for common duct exploration were jaundice or a history of jaundice, dilated common duct, small stones in the gall bladder, pancreatitis, and rarely a palpable stone in the duct. Stones were found in 27 (39%) of the ducts explored.

Duodenotomy was done in five patients. In one patient the reason for duodenotomy was to evaluate a pancreatic mass and in the others to determine the cause of ampullary obstruction. Two patients had sphincterotomies and two had choledochoduodenostomies.

There were two deaths, 2.9 per cent. The first was a 52 year old man who was admitted with acute chloecystitis which resolved. At surgery there were gallstones, but none in the common duct. There was a large, unresectable lymphoma arising from

the retroperitoneal area. After a long downhill course he died five weeks post operative.

The second death was a 74 year old man who previously had a cholecystostomy. An uncomplicated cholecystectomy and common duct exploration (stones were found) were done. He developed severe pneumonia and a sub hepatic absess and died 15 days after surgery.

There were 12 (17%) benign complications. A stone was overlooked in one patient. During his preoperative workup another patient developed hypotension from an intravenous cholangiogram. There was one false positive operative cholangiogram; that is, dye did not enter the duodenum, but no stones were found at exploration. Three patients had superficial wound infections. Two patients became hypotensive following post-op T tube cholangiograms, and one of these had severe gram negative sepsis. One patient had a bout of pancreatitis after surgery and two patients had bile drainage for three weeks. One patient's duodenum was perforated with a dilator. There was no injury to common duct or hepatic artery.

II. Emergency cholecystectomy for acute cholecystitis.

These patients were admitted with clinical symptoms and signs of acute cholecystitis. They did not improve with medical management and underwent cholecystectomy within 48 hours of admission. There were 32 patients in this group. Their ages ranged from 23 to 82 years, average 58 years. Common duct exploration was done in eight of these patients and stones were found in three. Operative cholangiography was done in nine cases.

The only death (3%) was a 62 year old man who was admitted with a five day history of severe illness and an acute abdomen. At surgery he had severe peritonitis, cholecystitis, cholecystoduodenal fistula, and liver absesses. Cholecystectomy and negative common duct exploration were done. He died on the fifth day with sepsis.

Other complications were one pulmonary embolus, one lower extremity thrombophlebitis, and two wound infections.

In one patient the gallbladder had perforated before surgery. Three patients who clinically had acute cholecystitis really had only chronic inflammation and one of these had no stones. Two patients had pancreatitis associated with acute cholecystitis.

III. Incidental cholecystectomy.

Twenty five patients had surgery for diseases not involving the biliary tract. However, gallstones were found in each patient and cholecystectomy was done in addition to the primary procedure. The age range was 23 to 89 years, average 62. The primary procedures are listed below.

Primary Procedure	Number of Patients
Abdominal aneurysm repair or bipass graft for aortic-iliac occlusive disease	11
Gastrectomy for ulcer disease	4
Removal of ectopic pregnancy	1
Excision of dermoid cyst of ovary	1
Colon resection for carcinoma	1
Lysis of small bowel adhesions	1
Nephrectomy for renal cyst	1
Exploration for peritonitis, cause unknown	1
Thyroidectomy for nodular goiter	1
Parotidectomy for melanoma	1
Splenectomy	1
Colostomy for obstructing carcinoma	1

There were four deaths which are summarized below.

1. An 89 year old man had repair of an abdominal aortic aneurysm and incidental cholecystectomy. The graft clotted and he died on the fifth day.

2. A 67 year old man had an aortic-femoral graft for occlusive disease and incidental cholecystectomy. He died on the fourth day in renal and cardiac failure.

3. A 79 year old man had repair of a leak-

ing abdominal aortic aneurysm and incidental cholecystectomy. He died in the immediate post operative period from massive bleeding from a tear in the aorta.

4. A 65 year old man had a nephrectomy for a bleeding renal cyst and incidental cholecystectomy. A few days later a bleeding ulcer was treated by gastrectomy. The duodenal stump leaked and he died.

IV. Cholecystostomy.

There were ten cholecystostomies. The age range was from 31 to 80 years, average 56 years. Nine patients had cholecystostomies for cholecystitis and one for pancreatitis. Three of these patients developed acute cholecystitis while hospitalized with some other problem. Two patients were operated on for some other problem and had "incidental" cholecystostomies because gallstones were present.

Two patients (20%) died. One was a 68 year old man who while convalescing from the repair of a popliteal aneurysm developed acute cholecystitis with gram negative sepsis. He died with sepsis nine days after cholecystostomy.

The other death was a 48 year old man admitted to the neurology service with a neuromuscular wasting disease. He developed acute cholecystitis and died from severe pneumonia after cholecystostomy. The common duct was not explored in either of the patients who died.

V. Cholecystectomy for trauma.

Eleven patients received gallbladder injury from abdominal trauma. All had cholecystectomies. Three patients died because of associated injuries to the vena cava, common duct, liver, and pancreas.

Discussion

Our complications during this three year period illustrate many of the hazards of biliary tract surgery. In our small group of patients having major vascular procedures and incidental cholecystectomies the mortality rate was high. Though these patients probably would have died had cholecystectomy been omitted, it seems unwise to add incidental cholecystectomy to operations which alone have great hazards.

Several different courses attract surgeons managing acute cholecystitis. First, one could do immediate cholecystectomy; or second, treat the acute cholecystitis and then do a cholecystectomy two or three days later after the acute symptoms have subsided and the diagnosis confirmed by X-ray studies; or third, treat the acute cholecystitis and do cholecystectomy after a delay of several weeks.

We prefer the second choice. Acute cholecystitis is usually not a surgical emergency. Most patients improve rapidly with antibiotics, intravenous fluids, and nasogastric suction. They feel well in two or three days and are then ready for cholecystectomy, without an additional waiting period, during their current hospitalization. One thus operates on a relatively well patient, rather than a patient acutely ill. The two or three day delay also allows time to confirm the diagnosis by cholecystography. We have not found the technique of cholecystectomy to be more difficult immediately following an episode of acute cholecystitis. The tissue planes are usually distinct and we believe that a six weeks "cooling off" interval between acute cholecystitis and cholecystectomy has no beneficial effect on the technical aspects of cholecystectomy. We have had no deaths using this general plan for patients with acute cholecystitis.

We are always aware that a few patients with acute cholecystitis do not improve with medical management. Failure of the patient to improve rapidly with antibiotics, intravenous fluids, and nasogastric suction is an indication for immediate operation.

Cholecystostomy is a rather infrequent operation here. Most of the patients in this series had cholecystostomy because they were precariously ill and not because of technical problems.

We advocate operative cholangiography in all patients having cholecystectomy. The value of operative cholangiography in reducing the number of unnecessary common duct explorations has been well described.[1,2,3] Because some surgeons doing cholecystectomies during the early part of this three year period were not convinced of the value of operative cholangiography, only 35 per cent of our patients had operative cholangiography.

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111th ANNUAL SESSION

OF THE

MEDICAL ASSOCIATION

OF THE

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Oxygen: The Most Misused Drug In The World.

(What everyone should know about oxygen.)

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Dothan, Alabama

INTRODUCTION

Oxygen was first introduced in 1774 by Joseph Priestly. In 1798 Antoine Lavoisier demonstrated that oxygen was the substance in the air that supported life. Several heart patients and lung patients were shown to improve by its use. Not until World War I was oxygen used in large quantities. Then, John Scott Haldane used oxygen to treat war gas victims with good results. Since this time the use of oxygen has grown. Now oxygen is available to almost everyone without control. It is used as if it had no side effects. In actuality, it is a very dangerous drug if not used with restraint.

Description: Oxygen is a colorless, odorless, tasteless gas. It is very diffusible in air, rapidly equilibrating through the smallest pinhole. Oxygen is not very soluble in fluids, however, and only a slight increase in fluid thickness results in the need for high partial pressures to cause oxygen transfer from the alveolus through alveolar walls to the blood stream.

Oxygen is carried in the blood (1) physically dissolved in plasma, and (2) attached to hemoglobin.

Blood does not carry much oxygen physically dissolved in plasma. Plasma will take up 0.003 cc. of oxygen for each one mmHg. oxygen pressure. The normal oxygen partial pressure of arterial blood is 80 mmHg.-100 mmHg. This would cause 0.24-0.3 cc. or volume per cent of oxygen/100 cc. of plasma to be carried by the blood.

Hemoglobin will carry 1.34 cc., or volume per cent of oxygen, per gram thus, 15 grams hemoglobin will carry 20.1 cc. or volume/100 cc. of plasma. At the normal blood pH and oxygen pressure of 80 mmHg., this causes 95 per cent saturation of hemoglobin, which would be 19 cc. or volume per cent oxygen/100 cc. Likewise, 100 mmHg. oxygen partial pressure would be 97.11 per cent saturation or 19.42 cc. or volume per cent oxygen/100 cc. If the blood has only 12 grams of hemoglobin, then 100 per cent saturation would be 16.08 cc. or volume per cent, rather than 20.1 cc. or volume per cent for 15 grams hemoglobin. Thus, it can be seen that increasing hemoglobin from 12 to 15 grams will cause an increase in oxygen of 4.02 cc./100 cc. to be carried.

If 100 per cent oxygen is given to the patient, physically dissolved oxygen will increase 0.003 cc. for each mmHg. increase in oxygen pressure. At 100 mmHg. pressure the blood is already carrying 0.3 cc. of oxygen physically dissolved. By using 100 per cent oxygen and washing out carbon dioxide and nitrogen, oxygen levels of 550-630 mmHg. may be obtained. Assuming 600 mmHg. is obtained (which is a good high average) this means the plasma will now carry 1.8 cc. of oxygen/100 cc. or an increase of 1.5 cc. over room air. Hemoglobin will only carry 1.34 cc. of oxygen per gram of hemoglobin at 100 per cent saturation no matter what the pressure of oxygen is. Now at 100 mmHg. oxygen pressure (room air) one gram of hemoglobin will carry 97.1 per cent saturation or 1.30 cc. or volume per cent rather than 1.34 cc. which it would at 100 per cent saturation. At 150 mmHg. pressure hemoglobin is at 98.8 per cent saturation and it would carry 1.32 cc. or volume per cent. At 200 mmHg. oxygen pressure hemoglobin is 99.3 per cent saturation or 1.33 cc. or volume per cent oxygen and, at 300 mmHg. pressure, there would be 100 per cent saturation and the hemoglobin would carry 1.34 cc. or volume per cent.

This 100 per cent oxygen inhalation if ef-

fective in a patient with 15 grams hemoglobin would only carry physically dissolved in plasma 1.5 cc. or volume per cent and on the hemoglobin molecule 0.6 cc. or a total of 2.1 cc. or volume per cent/100 cc. of blood and less for lower hemoglobin levels. Increasing hemoglobin from 12 to 15 grams, however, increased oxygen carrying capacity by 4.02 cc. or volume per cent with the patient breathing room air. It is unfortunate that the idea ever developed that increasing inspired oxygen concentrations so drastically would cause any real increase in oxygen carrying capacity of the blood.

The actual oxygen partial pressure at normal blood pH can be varied quite widely without greatly influencing the per cent of saturation of hemoglobin. As an example, at 7.4 pH and 15 grams of hemoglobin:

300 mmHg. PO_2 pressure=100% saturation=20.1 cc. oxygen

150 mmHg. PO_2 pressure=98.8% saturation=19.76 cc. oxygen

100 mmHg. PO_2 pressure=97.1% saturation=19.42 cc oxygen

80 mmHg. PO_2 pressure=95% saturation=19.00 cc. oxygen

63.5 mmHg. PO_2 pressure=90% saturation=18.00 cc. oxygen

45.0 mmHg. PO_2 pressure=80% saturation=16.00 cc. oxygen

Another important point in oxygen transport is the pH of the blood. In an alkaline pH a lower partial pressure of oxygen will be required to fully saturate hemoglobin than at normal body pH. Acid pH's require a higher partial pressure than normal body pH to produce the same per cent saturation of hemoglobin. For example at:

pH 7.50—70 mmHg. PO_2 causes 9.8% saturation

pH 7.40—70 mmHg. PO_2 causes 93.0% saturation

pH 7.30—70 mmHg. PO_2 causes 90.9% saturation

pH 7.20—70 mmHg. PO_2 causes 88.4% saturation

To look at it from a 90 per cent saturation standpoint:

90% saturation at—7.50 pH—requires 02 partial pressure 55.6 mmHg.

90% saturation at—7.40 pH—requires 02 partial pressure 61.8 mmHg.

90% saturation at—7.30 pH—requires 02 partial pressure 68.0 mmHg.

90% saturation at—7.20 pH—requires 02 partial pressure 75.4 mmHg.

Thus it can be seen that control of PH is very important in the delivery of oxygen to the hemoglobin molecule.

At the tissue level the reverse is true. In alkalotic states oxygen diffuses poorly from hemoglobin to tissue cells. In acidotic states, however, oxygen diffuses rapidly from hemoglobin to tissue cells.

It should be clear after this basic introduction that high oxygen levels are not as important as controlling levels of hemoglobin and degree of pH changes. Ventilation with control of pH is more important than letting the patient remain apneic and giving high oxygen levels.[1]

There are other changes that occur with high and low oxygen levels that are not as well understood as these basic textbook facts. They are well documented however.

Pulmonary Effects of High Oxygen Partial Pressures:

Breathing dry air or oxygen causes thickening of secretions, blocking up of the ciliary-mucous esculator, and denaturation of alveolar surfactant. Also, it causes drying and cracking of the mucous membranes with infection, hemorrhage and other problems. In addition to these changes oxygen causes pulmonary lymph stasis.[1, 2, 3]

If too much water is delivered to the alveolus it will denature surfactant. Water must be delivered in very small particulate form to be trapped there.[3, 4]

High oxygen levels also cause dilatation of pulmonary arterioles. The bronchial arteries are not so affected and, in them the same as in other peripheral arteries (to be discussed), vasoconstriction occurs. The pulmonary artery and bronchial artery have communications at the capillary bed. The pulmonary artery supplies the pulmonary capillary bed, and the bronchial artery supplies all nonaerated lung tissue as well as the pulmonary artery vasovasorium.[5, 6]

There appears to be little gained by using high inspiratory levels of oxygen. The effects on the lungs alone are drastic.

Pulmonary Effects of Low Oxygen Partial Pressures:

Low levels of oxygen as would be expected have a reverse effect. Lymph flow rate increases to maximum. There is produced a pulmonary artery vasoconstriction and bronchial artery vasodilatation.[1, 5, 6] The pulmonary artery vasoconstriction, if generalized, will cause pulmonary hypertension and, if localized, will cause shifting of pulmonary artery circulation to oxygenated portions of the lungs.

Cardiovascular Effects of High Oxygen Partial Pressures:

High oxygen partial pressures cause a decreased cardiac output and heart rate, an increase in blood pressure, and increased peripheral resistance with decreased tissue perfusion.[7-20] Some have measured these levels in normals and found an average decrease in cardiac output of 10-20 per cent and an increase in diastolic pressure of ten per cent.[13-14] In myocardial infarction, studies have shown an average slowing of heart rate of 49 per cent, an average decrease in cardiac output of 17 per cent, a loss of Stroke volume of 14 per cent, a 2.5 per cent increase in diastolic pressure, and an increase in peripheral resistance of 25 per cent with the use of high oxygen concentrations.[12]

The increase in peripheral resistance causes a decrease in tissue perfusion. As a result there is a reduced perfusion of oxygen per unit of time and tissue oxygenation is reduced so that there is a shift to anerobic metabolism and the production of a metabolic acidosis at the tissue level.[9, 11, 12, 15, 16, 17, 18, 19]

The coronary artery circulation also reacts with vasoconstriction, reduced coronary blood flow and production of a metabolic acidosis within the myocardium.[21, 22, 23, 24]

It appears that the level of oxygen that produces these changes in the normal is that of 28-35 per cent or above.[7, 12, 20] This would be an arterial oxygen partial pressure of 150-200 mmHg. thus an arterial oxygen partial pressure of 150 mmHg. or under, but over 80 mmHg. is sufficient to maintain tissue oxygenation at a maximum without getting difficulty because of a too high oxygen partial pressure. Giving oxygen that produces partial pressures over 200 mmHg. would run the danger of producing decreased cardiac output, decreased heart rate, increased diastolic pressure, increased peripheral resistance with decreased tissue perfusion and oxygenation despite increased oxygen partial pressures, and tissue level metabolic acidosis due to anerobic metabolism. There is no increase in myocardial oxygen utilization associated with high inspired levels.[22]

Cardiovascular Effects of Decreased Oxygen Partial Pressures:

Low arterial oxygen saturations cause (1) decreased cardiac output, (2) decreased blood pressure, (3) decreased peripheral resistance, and (4) increased tissue blood flow. There is also usually an associated metabolic acidosis. Hypoxemia likewise causes coronary artery vasodilatation and increased coronary artery flow, but, with decreased tissue oxygenation and metabolic acidosis.[24-30] Hypoxemia has also been implicated as the cause of the respiratory alkalosis seen in myocardial infarction.[27] It has also been pointed out that severe hypoxia or anoxia of 18 minutes causes myocardial necrosis.[29] A reduction in fluid oxygen tension causes a marked fall in myocardial contractile force.[29]

Myocardial Infarction and Heart Failure And Oxygen Effects and Oxygenation:

All investigators report low arterial oxygen partial pressures in acute myocardial infarction. This tends to be worse in shock and failure, than in uncomplicated infarction.[7, 19, 31-42] Also routinely found in myocardial infarction and ischemia are decreased cardiac output, decreased blood pressure, and a marked increase in peripheral resistance.[41, 43, 44] With heart failure and low oxygen tension there is abnormal myocardial metabolism. As failure ensues, and hypertrophy and dilatation occur, more oxygen is required to produce the same period of contraction and degree of contraction.[45]

This decreased output with increased left atrial pressures causes increased pulmonary venous congestion, increased pulmonary stiffness, and increased dead space to ventilated volume ratio. In all cases increased maldistribution of inspired air to perfused lung tissue was noted, and it also causes an increase of interpulmonary arteriovenous shunting of blood. All of these cause an increase in the alveolar capillary gradient and reduced arterial oxygen saturation.[18, 33, 34, 36, 38, 39, 41, 46, 47] There is an increasing diffufusion problem as demonstrated in infarction and in other conditions with increased left atrial pressures.[48-54] These probably cause the decreased arterial oxygen partial pressure. The most commonly noted pattern is hypoxia with a respiratory alkalosis due to hypoxia.[27, 31] Low oxygen partial pressures were also found to be due to interpulmonary shunting of blood. At least 3-17 per cent of cardiac output is shunted through the lungs, with an average of nine per cent of cardiac output being shunted.[31] When shunting of cardiac output through the lungs reaches 30 percent then 100 per cent oxygen at one atmosphere will not produce 70 mmHg. arterial pressure.[55]

The respiratory alkalosis that develops as a result of a myocardial infarction is not usually stopped by raising the arterial oxygen partial pressure to normal. Heart failure is only one cause of hyperventilation; other causes being pain, apprehension and abnormal feelings developed as a result of the alkalosis itself which usually makes hyperventilation self-perpetuating. Another factor not generally appreciated is that the blood brain barrier passes CO_2 rapidly, but requires active transport mechanisms to come into play for H+ ion and bicarbonate ions. The pH changes in cerebrospinal fluid influence breathing through fourth ventricle receptors. Also with increased pulmonary venous congestion and decreased cardiac output, there is decreased perfusion of cerebrospinal fluid and an increase in cerebral spinal pressure.[56, 57]

When cardiogenic shock ensues, the decreased cardiac output, decreased oxygenation of the blood and markedly increased work of breathing makes for a steadily losing battle.[11]

Excessive oxygen (to cause partial pressures over 200 mmHg.), when given, causes further decrease in cardiac output and increase in peripheral resistance, with decreased tissue perfusion and metabolic acidosis. This is not wise. On the other hand not to give oxygen (let partial pressure drop below 70 mmHg.) and to let the patient deteriorate is not good either. Thus two schools of thought exist. One that oxygen should be given to all myocardial infarctions.[59] The other view is that oxygen should only be used in cyanosis, shock, and failure.[59, 60, 61] The first view is based on the fact that the higher the partial pressure the more the transfer of oxygen from blood to cell.[7, 62] This has been taken into account and it was found that where high partial pressures are used (as has been pointed out) the decreased volume flow carries so much less oxygen per unit of flow to unit of tissue that anerobic metabolism resulted despite, and because of, the high partial pressure.

Too low, as well as too high, partial pressures are equally dangerous. Respiratory alkalosis, and respiratory and metabolic acidosis can occur with hypoxemia. Rules of thumb, and appearance of the patient, cannot be used for intelligent treatment of the

patient. Only close monitoring of arterial pH, PO_2, and PCO_2, can correctly guide treatment. All parameter should be maintained within normal limits.

Morphine: In most instances where oxygen is used, morphine is also frequently used. Morphine is not an innocuous drug circulatory and respiratory-wise. It causes decrease in breathing and bronchiolar constriction. In addition, and often not appreciated, it causes decrease in arterial oxygen saturation by producing an increased alveolar to capillary gradient. Morphine causes decrease in cardiac output and bradacardia. There has also been noted a rise in PCO_2 with its use.[11, 63,66]

Cardiac Arrhythmias, Oxygen, Ph, and Carbon Dioxide:

Nine cases of myocardial infarction with intractible arrhythmias that were not amenable to treatment until pH, PCO_2, and PO_2 abnormalities were corrected, are reported, and documented.[55, 67] These included alkalosis, acidosis (respiratory), and metabolic and various abnormal oxygen saturations.

From a specific standpoint low tissue oxygen tensions cause reduction in myocardial contractual force.[29, 34] Lactic acidosis causes a decreased ionotrophic effect with decreased ventricular performance.[19, 68, 69] Acidosis and hypoxia cause decreased ionotrophic effect and reduce the myocardial response to endogenous and exogenous catecholamines.[70] Within the infarct zone metabolic and lactic acidosis occur, no matter what, with decreased contractility.[71]

Many factors increase the depolarization rate of the automatic cells of the Purkinje system: (1) hypoxia (2) catecholamines (3) hypokalemia (4) digitalis (5) a number of the metabolic breakdown products, (6) acidosis, (metabolic or respiratory) (7) and respiratory alkalosis.[55, 72, 73] Hypo- or hypercapnea cause increased rhythmicity of automatic cells within the Purkinje system, particularly in the presence of ouabain.[74] Hypercapnea with straining down to produce 20-40 mmHg. pressure in the lungs or above cause "apneic bradycardia."[75] The number and severity of arrhythmias in myocardial infarction have been directly related to the degree of hypoxia.[34]

Acidosis, both metabolic and respiratory, has been repeatedly associated with the causing of arrhythmias. This is both with high, normal, and low arterial oxygen saturation.[11, 42, 76, 84]

Alkalosis, usually respiratory, with high oxygen levels or alkalosis with low oxygen levels both are frequently associated with arrhythmias of all sorts. In alkalosis there is a decreased ionization of calcium, a decrease in serum potassium with decrease in buffer base, and an increased susceptibility of the myocardium to catecholamines as well as an intracellular shift of sodium and potassium.[85, 89] All of these potentiate arrhythmias.

Finally, the most dangerous of all, rapid drops of elevated PCO_2 levels, particularly in a hypoxic patient, can cause uncontrollable ventricular fibrillation.[90-94]

It is a shame that this much is known about blood gases and pH and the drastic results that can occur by not following this knowledge and yet they are not monitored. Everyone is so busy discovering the effects of these arrhythmias by means of the galvanometers' scribblings, and testing shock and failure, that they do not prevent these changes. Prevention is still far easier and less expensive than treatment.

Clinical Application:

It is unfortunate that with all its drawbacks oxygen is so freely used in every hospital, clinic, office, ambulance, etc., either piped or in tanks. No one questions whether oxygen should be used or not. Everything that runs on gas flows runs on oxygen. Nebulizers, croupettes, tents, IPPB machines, etc. Literally everything is run on oxygen. Had the present knowledge been known and oxygen just discovered it would require a book instead of a package insert.

Actually people do not know whether they are getting results or not. Anyone who complains of not being able to breathe is given

copious amounts of oxygen. As an example, a patient comes into the emergency room breathing so deep and fast he cannot increase anymore. Relatives are fanning and the whole entourage demands immediate treatment. Oxygen is started with face mask at 15 liters/min. Then on questioning, it is related that first, he started overbreathing from any of the 50-odd causes, and, secondly, he then began to feel like he could not get his breath, a deep breath, a long breath, or his breathing was doing no good. He then felt light-headed, dizzy, with blurred vision, perioral numbness and tingling, numbness and tingling all over, was going to sleep all over, and passing out. He and the family are frantic. He may be pale or flushed and sweating from all the hard work. The doctor arrives, continues the oxygen, gives usually a narcotic and a sedative. Between sedation, respiration, depression, and oxygen toxicity with euphoria and decreased cerebral blood flow and the changes that occur in the patients thinking that "something will be done now," the hyperventilation syndrome slowly subsides. The treatment is given credit. Had blood gases been obtained, it would have shown a pH 7.55 or higher, PCO_2 around 10 mmHg., and PO_2 130 mmHg. Had the patient been given five per cent CO_2 in oxygen or air, it would have corrected the respiratory alkalosis in a few minutes. Another example is a patient who works eight hours per day at a hard job, does his own lawn, garden, repairs, plays golf, hunts, fishes, a very active person physically. He goes to a physician, and is told that his X-ray shows a little emphysema. After hearing this dreaded news, he finds he has trouble getting to his car because of shortness of breath. He goes to bed when he gets home; he does not feel well. The next day he can hardly go to work and is too short of breath to do his work that he did untiringly the day before. He goes back to the doctor who probably uses a high flow rate IPPB machine with Isoproterenol in it, and who gives him an IPPB treatment. The high flow rate in the mouth reassures him he is getting more air when he is actually getting less. The Isoproterenol which rains out in the mouth and primary and secondary bronchi (the only way this type of machine can deliver medication) is picked up and causes peribronchial vasodilatation with retarding of air flow. The Isoproterenol produces its euphoric effect that is addicting. Because this setup does not work and the patient hypoventilates with the equipment he builds his CO_2 up and feels better until he starts hyperventilating again. Here the machine and medication is praised and given credit for doing something. On this basis and with this type of patient, this type of equipment has become popular. Had chronic hyperventilation been recognized as the cause, explained, and a small paper bag used five minutes out of the hour until it went away, the patient would have been better off.

How frequently does a doctor decide the patient should not have oxygen because of lung problems, only to order nebulization that is run by wall or tank oxygen? Recently a surgeon and an anesthetist were having trouble with a severe lung patient following surgery. The patient could not breathe satisfactorily and was cyanotic. They evaluated the situation and decided since oxygen was so dangerous, they gave the patient five per cent CO_2, (in this hospital five per cent CO_2 in oxygen was all they had.) They would not listen to the Inhalation Therapist who brought the tank up to them. They were successful in pushing the patient's PCO_2, which had been about 70 mmHg. more or less before surgery, to over 100 mmHg. and producing a beautiful oxygen apnea in the patient. Inhalation therapy finally got the patient and after a period restored normal breathing and stable blood gases and pH.

A more obscure situation in patients with heavy sedation and on breathing equipment occurs. A patient, for example, with pneumonia and a moderate interpulmonary A-V shunt through the pneumonic area has somewhat of a problem to begin with. He is usually sedated, given cough syrups with antihistamines which sedate and cough suppres-

sants, usually codeine, which depresses breathing. He is given moisture with the wrong equipment which produces a too small particle size and which enters the alveolar area denaturing surfactant and causing atelectasis in the remaining normal lung. This increases interpulmonary A-V shunting. The patient is also being given 60-40 air-oxygen mixture IPPB. The mixing venturie is sensitive to changing compliance within the lungs. As the lungs get stiff, as they do here, there is more oxygen flow with less air mixture so that frequently high inspiratory oxygen concentrations are delivered. All that is wanted is medication delivery by the machine. The sedated patient begins to have a slowly increasing PCO_2. Then, with an IPPB treatment the CO_2 not being well washed out, the PCO_2 passes 70 mmHg. pressure. The respiratory center now is driven by oxygen want. Very high oxygen concentrations are delivered as described. Following treatment oxygen apnea occurs during which period CO_2 rises due to the lack of ventilation and due to the removal of oxygen with no replacement so that the CO_2 gets disproportionately high. If not recognized, and the patient ventilated mechanically until PCO_2 is reduced, the patient will die. How many times per day this happens is not known. If compressed air instead of oxygen were used, this problem would not exist.

In the coronary care unit hyoxia is the rule and should be corrected to normal only. Metabolic acidosis, respiratory acidosis, or respiratory alkalosis in various degrees develop. There is no way to determine what is going on in a particular patient by any means other than actual frequent blood gas and pH monitoring. Rule of thumb guessing is as a rule more dangerous than doing nothing. Most arrhythmias would not occur if the pH, PCO_2, and PO_2 were kept within normal limits. Where serious arrhythmias occur if there is an abnormality of PH, PCO_2, and PO_2 it is likely to be persistant and not respond to treatment until the blood gas and PH abnormalities are corrected.

In the patient on a respirator, there are more yo-yo methods of assuring proper ventilation than there are legs on a millepede. All methods are designed to keep pH, PO_2, and PCO_2 normal. Inspiratory and expiratory tidal volume monitoring do not tell how well the patient is being ventilated. Color does not give an indication of normal blood gases and pH and neither does breathing. It is usually found that volume-cycled machines work better than high flow rate IPPB machines but the patient usually remains in a mild to moderate respiratory acidosis. IPPB flow rate controlled machines with a slight negative phase routinely cause respiratory alkalosis and thus require frequent checks. There is no substitute for blood gas analysis.

What Is In The Future:

There is now available an arterial probe that gives continuous PCO_2. There is a probe on the way which will be in clinical trial as of October 1971, that will give constant oxygen partial pressures. With these in place continuously, PCO_2, and PO_2 can be determined with alarms for low and high. There is now a mixing valve on the market that will work and can be driven by the arterial oxygen probe so that blood PCO_2 levels can control the inspired concentrations of oxygen. The only danger would be if it were used on an oxygen and compressed air tank. Here, if the tank ran out, the flow would stop.

There is an automatic respirator in the near future that is adjusted automatically by the arterial oxygen and CO_2 probe. This controls the volume and rate and oxygen concentrations of inspired air automatically in the apneic patient. In the non-apneic patient it controls oxygen saturations and sounds off where CO_2 gets too low and too high.

Conclusion:

Oxygen is too freely available. Hospitals with only one piping system should pipe only compressed air, making oxygen utilization available only on direct order. New hospitals and where it is possible otherwise, should pipe for both oxygen and compressed air, since in the near future the better equipment used will require both.

(Bibliography will be furnished on request).



Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Many patients on special diets will find soups they can enjoy among the more than 50 different varieties available.



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Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*



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propantheline bromide
A Relief Factor in Peptic Ulcer

Worry, frustration, job pressure—all set up excessive vagal currents in patients with peptic ulcer.

Pro-Banthine "insulates" the stomach, the duodenum and the lower intestinal tract—the sites where these destructive currents take their toll.

This "insulation" helps block excessive enteric activity and acidity, thus helping to provide the proper environment for the healing of peptic ulcers.

It's nice to know that Pro-Banthine provides this protection at a dosage that causes little or no discomfort and that, unlike ataractic agents, Pro-Banthine does not cloud the patient's awareness or thought processes.

By moderating excessive vagal currents Pro-Banthine relieves spasm, acid burn and pain. By reducing gastric motility Pro-Banthine also prolongs the activity of antacids.

Indications: Peptic ulcer, gastroenteritis, pylorospasm, biliary dyskinesia, functional hypermotility and irritable colon.
Contraindications: Glaucoma, severe cardiac disease.
Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

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SEARLE *Research in the Service of Medicine*
Distributed by G. D. Searle & Co., P. O. Box 5110, Chicago, Illinois 60680



Helps control the underlying problem– anxiety

Miltown®
(meprobamate)

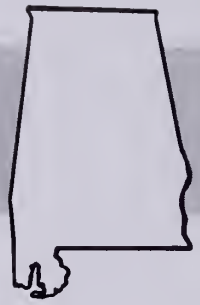
when reassurance is not enough

Indications: Relief of anxiety and tension; adjunctively in various disease states in which anxiety and tension are manifested; and to promote sleep in anxious, tense patients.
Contraindications: Acute intermittent porphyria and allergic or idiosyncratic reactions to meprobamate or related compounds such as carisoprodol, mebutamate, tybamate, carbromal.
Warnings: *Drug Dependence:* Physical and psychological dependence and abuse have occurred. Chronic intoxication, from prolonged use and usually greater than recommended doses, leads to ataxia, slurred speech, vertigo. Carefully supervise dose and amounts prescribed, and avoid prolonged use, especially in alcoholics and addiction-prone persons. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis; rarely convulsive seizures, more likely in persons with CNS damage or pre-existent or latent convulsive disorders). Therefore, reduce dosage gradually (1-2 weeks) or substitute a short-acting barbiturate, than gradually withdraw. *Potentially Hazardous Tasks:* Driving a motor vehicle or operating machinery. *Additive Effects:* Possible additive effects between meprobamate, alcohol, and other CNS depressants or psychotropic drugs. *Pregnancy and Lactation:* Safe use not established; weigh potential benefits against potential hazards in pregnancy, nursing mothers, or women of childbearing potential. Animal data at five times the maximum recommended human dose show reduction in litter size due to resorption. Meprobamate appears in umbilical cord blood at or near maternal plasma levels, and in breast milk at levels 2-4 times that of maternal plasma. *Children Under Six:* Drug not recommended.
Precautions: To avoid oversedation, use lowest effective dose, particularly in elderly and/or debilitated patients. Consider possibility of suicide attempts; dispense least amount of drug feasible at any one time. To avoid excess accumulation, use caution in patients with compromised liver or kidney function. Meprobamate may precipitate seizures in epileptics.
Adverse Reactions: *Central Nervous System:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impairment of visual accommodation, euphoria, overstimulation, paradoxical excitement, fast EEG activity. *Gastrointestinal:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations, tachycardia, various forms of arrhythmia, transient ECG changes, syncope; also, hypotensive crises (including one fatal case). *Allergic or Idiosyncratic:* Usually after 1-4 doses. Milder reactions: itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others: leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy, fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe, rare hypersensitivity: hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome; bullous dermatitis (one fatal case after meprobamate plus prednisolone). Stop drug, treat symptomatically (e.g., possible use of epinephrine, antihistamines, and in severe cases corticosteroids). *Hematologic:* Agranulocytosis and aplastic anemia (rarely fatal), but no causal relationship established. Rarely, thrombocytopenic purpura. *Other:* Exacerbation of porphyric symptoms.
Usual Adult Dosage: 1200 to 1600 mg daily, in three or four divided doses; doses above 2400 mg daily not recommended.
Overdosage: Suicidal attempts with meprobamate, alone or with alcohol or other CNS depressants or psychotropic drugs, have produced drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Empty stomach, treat symptomatically; cautiously give respiratory assistance, CNS stimulants, pressor agents as needed. Meprobamate is metabolized in the liver and excreted by the kidney. Diuresis and dialysis have been used successfully. Carefully monitor urinary output; avoid overhydration; observe for possible relapse due to incomplete gastric emptying and delayed absorption.

REV. 10-71

Before prescribing, consult package circular or latest PDR information.

WALLACE PHARMACEUTICALS
Cranbury, N.J. 08512



around the state

Vital Statistics

NEW MEMBERS

Colbert County

Braund, Ralph Raymond, Jr., b 37, mc Univ. Tennessee 64, recip. Tennessee 67, Colbert County Hospital, P. O. Box 2241, Muscle Shoals Station, Sheffield, Alabama 35660. Path-CP.

Randolph County

Sasser, Ramon Carrol, b 36, mc Univ. Tennessee 62, recip. Mississippi 65, 526 Price Street, Roanoke, Alabama 36274. S.

Russell County

Kraatz, Robert Werner, b 09, mc Univ. Leipzig (Germany) 35, sb 71, Cobb Memorial Hospital, Phenix City, Alabama 36867. Path.

MEMBERS DECEASED

Baldwin County

Armistead, Sidney Davidson, Daphne, Alabama, Deceased 12/31/71.

Elmore County

Majure, Ernest Odell, Tallassee, Alabama, Deceased 1/8/72.

Jefferson County

Wilson, Frank Cunningham, Sr., Birmingham, Alabama, Deceased 1/26/72.

Mobile County

Savage, Charles Henry, Sr., Prichard, Alabama, Deceased 12/7/71.

Morgan County

Lavender, Claude Wilson, Decatur, Alabama, Deceased 12/13/71.

MEMBER REMOVED

Montgomery County

Barnes, Frances Page Shaw, Montgomery, Alabama, Transfer to Nonmember.

CHANGES OF ADDRESS

Autauga County

Nichols, Robert K., present Prattville to 136 East Main Street, Prattville, Alabama 36067.

Parker, Walter E., present Prattville to 404 Washington Street, Prattville, Alabama 36067.

Tew, Walter C., Jr., present Prattville to 136 East Main Street, Prattville, Alabama 36067.

Blount County

Murphree, Roland E., present Oneonta to 1010 Park Avenue, Oneonta, Alabama 35121.

Stevens, Johnnie W., present Oneonta to 211-7th Avenue, Atmore, Alabama 36502.

Calhoun County

Strange, Charles E., present Jacksonville to 115 East Francis Avenue, P. O. Box 307, Jacksonville, Alabama 36265.

Chambers County

Guin, Dan M., present Lanett to 704 Avenue C, West Point, Georgia 31833.

Etowah County

Feist, Fredric W., present Gadsden to 1413 Rainbow Drive, P. O. Box 23, Gadsden, Alabama 35902.

Houston County

Woods, Thomas B., Jr., present Dothan to 509 West Main Street, Dothan, Alabama 36301.

Jefferson County

Akin, John M., Sr., present Birmingham to Professional Office Building, Suite 310, 800 Montclair Road, Birmingham, Alabama 35213.

Blanton, James H., present Birmingham to 1032 South 18th Street, Birmingham, Alabama 35205.

Gantt, Charles B., Jr., present Birmingham to 2954 Pine Haven Drive, Birmingham, Alabama 35223.

Kesmodel, Karl F., Jr., present Birmingham to 1717 South 11th Avenue, Birmingham, Alabama 35205.

Mathews, Robert D., present Birmingham to 12727 Warwick Boulevard, Newport News, Virginia 23606.

Meadows, Edward R., present Birmingham to 1717 South 11th Avenue, Birmingham, Alabama 35205.

Miller, A. Lamar, Jr., present Dothan to 211 West Main Street, Dothan, Alabama 36301.

Thompson, Harvey J., Jr., present Birmingham to 1717 South 11th Avenue, Birmingham, Alabama 35205.

Tidwell, Owen K., present Birmingham to 406 Broad Street, La Grange, Georgia 30240.

Wade, Stanley A., Jr., present Fairfield to 1739 Saulter Road, Birmingham, Alabama 35209.

Walker, James H., present Birmingham to 924 South 18th Street, Birmingham, Alabama 35205.

Weldon, William V., present Birmingham to 1717 South 11th Avenue, Birmingham, Alabama 35205.

Lee County

Brown, Morgan W., present Auburn to 211 Cary Drive, P. O. Box 1854, Auburn, Alabama 36830.

Bruce, Byron S., present Opelika to 215 North 10th Street, Opelika, Alabama 36801.

Carter, A. Z., Jr., present Auburn to 336 North Gay Street, Auburn, Alabama 36830.

Klinner, Kent V., Jr., present Opelika to 1711 Pepperell, Opelika, Alabama 36801.

Sims, Dorsey T., present Auburn to 403 Opelika Road, Box 609, Auburn, Alabama 36830.

Thomas, Benjamin F., Sr., present Auburn to 118 South Gay Street, Box 1511, Auburn, Alabama 36830.

Thomas, Benjamin F., Jr., present Auburn to 118 South Gay Street, Box 1511, Auburn, Alabama 36830.

Weldon, Howard S., present Opelika to 2100 Pepperell, Opelika, Alabama 36801.

Marengo County

Fitz-Gerald, Maurice J., present Demopolis to Box 774, Highway 80 West, Demopolis, Alabama 36732.

Holifield, Reese M., present Demopolis to Drawer H, 1100 South Cedar Street, Demopolis, Alabama 36732.

Ketcham, Paul F., present Demopolis to Drawer W, 202 Highway 80 East, Demopolis, Alabama 36732.

Perret, N. Earl, Jr., present Demopolis to Box 774, Highway 80 West, Demopolis, Alabama 36732.

Whitfield, Frederick S., Jr., present Demopolis to Drawer W, 202 Highway 80 East Demopolis, Alabama 36732.

Mobile County

Balovich, Vernon N., present Mobile to 201 Cox Street, Mobile, Alabama 36604.

Boger, Robert M., present Mobile to Box 687, Albemarle, North Carolina 28001.

Montgomery County

Averrett, Margaret E., present Montgomery to 913 Mansard Drive, Apt. 111, Birmingham, Alabama 35209.

Cook, Ottis D., present Montgomery to 1824 Mt. Meigs Road, Montgomery, Alabama 36107.

Johnson, H. Cecil, present Montgomery to P. O. Box 11241, Montgomery, Alabama 36111.

Morgan County

Blanton, Harold L., present Hartsell to c/o Nautilus Hospital, Waverly, Tennessee 37185.

Brogdon, Paul P., Jr., present Hartselle to Highway 31 North, P. O. Box 1066, Hartselle, Alabama 35640.

Talladega County

Camp, Charles L., present Sylacauga to 102 East Second Street, Sylacauga, Alabama 35150.

Tuscaloosa County

Patton, Thomas H., Jr., present Tuscaloosa to University Health Center, P. O. Box Y, University, Alabama 35486.

Walker County

Harp, Richard D., present Jasper to 218 East 19th Street, Jasper, Alabama 35501.

Hudson, A. Ray, present Jasper to Route 8, Box 75, Jasper, Alabama 35501.

Wilcox County

Jones, J. Paul, present Camden to Broad Street, Camden, Alabama 36726.

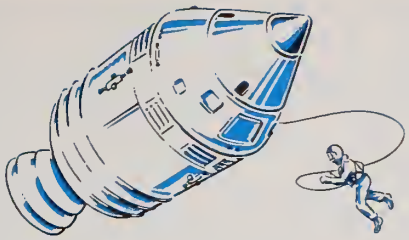
Winston County

Wood, John E., present Haleyville to Box 699, Haleyville, Alabama 35565.

NEW TELEPHONE NUMBERS

Averrett, M. E., Montgomery	871-6489
Braund, R. R., Jr., Colbert	383-2821
Butler, C. L., Madison	534-4082
Combs, R. M., Montgomery	288-4171
Crook, D. H., Coffee	897-2232
Davis, R. W., Lamar	695-9148
Dixon, J. M., Jefferson	933-6902
Durham, H. S., Jr., Montgomery	281-1871
Foster, H. W., Macon	727-8276
Hamner, B. R., Montgomery	281-1651
Harris, R. A., Montgomery	281-1651
Hollingsworth, J. H., Tuscaloosa	345-7000
Kraatz, R. W., Russell	298-7811
Lawaczeck, E. M., Jefferson	933-6902
Laws, H. L., II, Calhoun	237-1624
Mullins, H. C., Jr., Baldwin	928-0310
Nolan, T. C., Montgomery	281-1871
Norton, T. B., Sumter	968-7379
Patton, T. H., Jr., Tuscaloosa	553-3692
Pugh, W. H., Montgomery	281-1157
Sasser, R. C., Randolph	863-2141
Silberman, D. J., Jefferson	592-8976
Smith, C. E., Lamar	695-7191
Stevens, J. W., Blount	368-8161
Strange, C. E., Calhoun	435-7634
Sullivan, P. G., Jefferson	836-2251
Sutton, W. R., Blount	429-3374
Tally, W. J., Etowah	546-9266
Thomas, M. C., Montgomery	281-1871
Wade, S. A., Jr., Jefferson	879-6133

(Continued on Page 715)



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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During pregnancy or when K.I. is contraindicated or not tolerated

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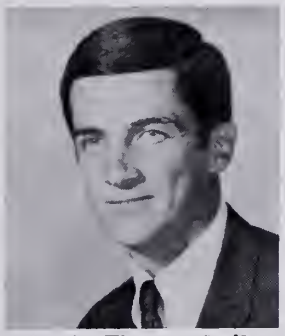
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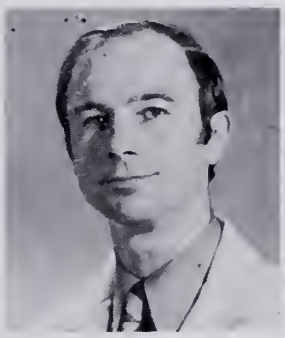
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David Vernard Bradley
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Robert Monroe Bucher
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Mobile



James Roland Carter
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Birmingham



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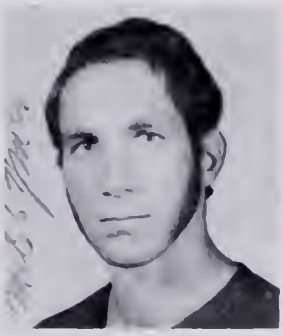
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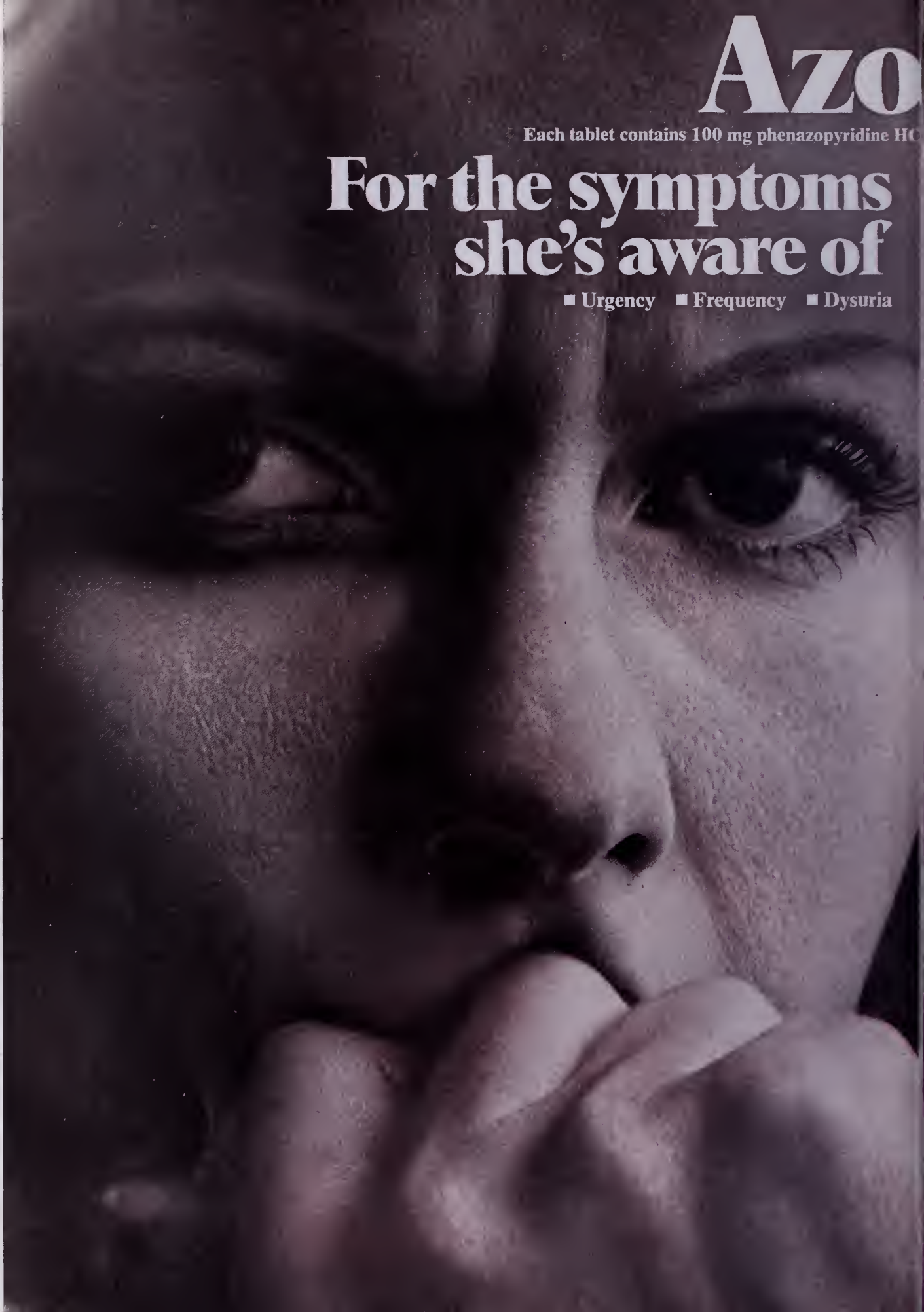


Charles Irving
Huddleston, M. D.
Birmingham



Miles Donald Hyman
M. D.
Birmingham

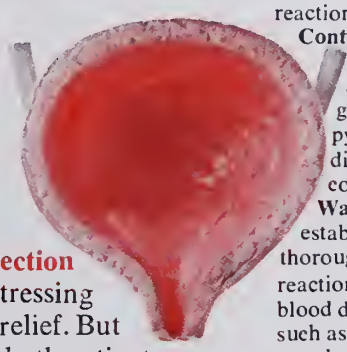
(Continued on Page 718)


Azo
Each tablet contains 100 mg phenazopyridine HC
For the symptoms she's aware of
■ Urgency ■ Frequency ■ Dysuria

Gantanol®

nd 0.5 Gm sulfamethoxazole.

For the infection you're aware of



ecisive dual action relieves symptoms, controls infection

Urgency, frequency, dysuria—these are the distressing mptoms of cystitis for which she wants immediate relief. But ıpid control of the infection is equally important to both patient ıd physician. This is the situation that demands dual-action Azo antanol: the analgesic action of Azo (phenazopyridine HCl) for ıpid relief of pain, the antibacterial action of Gantanol® ulfamethoxazole) to control the bladder infection.

apid antibacterial action/around-the-clock coverage

In from 2 to 3 hours after the initial 2-Gm adult dose of zo Gantanol, therapeutic blood and urine levels begin to control ısceptible *E. coli* as well as susceptible gram-negative and am-positive pathogens. Subsequent b.i.d. doses maintain anti- ıcterial levels throughout a 24-hour period—especially important help control bacterial build-up in urine retained during sleeping ours. The usual precautions in sulfonamide therapy, including aintenance of adequate fluid intake, should be observed. The ost common side effects are nausea, vomiting and diarrhea.

he'll feel better while she gets better

As the antibacterial action of Gantanol begins to control the fection, the analgesic action of the Azo component starts relieving e symptoms associated with her infected, inflamed and irritated adder. In acute, nonobstructed cystitis—when rapid relief of mptoms and early control of infection are essential—prescribe zo Gantanol, the basic therapy that helps your patient feel tter while she gets better.

n acute painful nonobstructed cystitis

Azo Gantanol®

ch tablet contains 0.5 Gm sulfamethoxazole d 100 mg phenazopyridine HCl.

asic therapy

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis, a frequently dose-related reaction, may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infection is 4 tablets initially, then 2 tablets morning and evening. If pain persists beyond seven days, causes other than infection should be sought. After relief has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl, bottles of 100 and 500.

(Continued from Page 715)



Jerome Gordon Johnson
M. D.
Montgomery



Gary Neil Little
M. D.
Birmingham



Harry Edward Logue
M. D.
Birmingham



Howell Joiner Martin
M. D.
Mobile



Martha Williams
McDonald, M. D.
Birmingham



Samuel Carter
Miller, Sr., M. D.
Centre



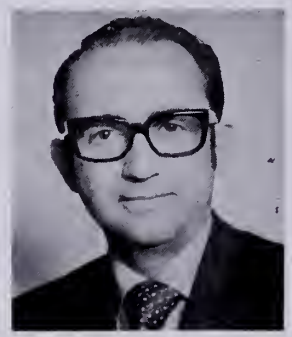
Philip Edward Negus
M. D.
Oxford



Runas Powers, Jr.
M. D.
Huntsville



Thomas Adams
Roberts, Jr., M. D.
Montgomery



James Harris Sammons
M. D.
Baytown, Texas



Lyman Jay Scripter
M. D.
Mobile



Burt Fowler Taylor
M. D.
Mobile



Lco Tjeng Thay Tan
M. D.
Birmingham



Karl Theodore Weber
M. D.
Birmingham



William Bruce Wignall
M. D.
Anniston



John Draper
Witherspoon, M. D.
Columbus A.F.B., Miss.

(Continued on Page 721)

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug, in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation and increased blood pressure. One published report described T wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets. One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.). TEPANIL One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

1 5325 2076

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Painful night leg cramps...



unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

- □ Prevents painful night leg cramps
- □ Permits restful sleep
- □ Provides simple convenient dosage— usually just one tablet at bedtime

Prescribing Informotion — Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombaphlebitis, arteriosclerosis and static faat deformities. **Contraindications:** Quinamm is contraindicated in pregnancy because of its quinine content. **Precoutions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may praduce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet fallawing the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

Merrell

MERRELL-NATIONAL LABORATORIES 1-3508(3050)
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Trademark: Quinamm

Quinamm

(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps.

(Continued from Page 718)



Joseph Doyle Woddail
M. D.
Hamilton

(Pictures not available)

Nath Thompson Camp
M. D.
Jasper

William Thomas Edge
M. D.
Birmingham

Thaddeus Hagan Ferrell
M. D.
Jasper

James Samuel Gibbs
M. D.
Ft. Rucker

Lawrence Ezra Green
M. D.
Charleston, S. C.

Carl William Hartman
M. D.
Montgomery

William Jerry Howell
M. D.
Cullman

Chester Wright Jenkins
M. D.
Birmingham

Donald Lloyd LeQuire
M. D.
Scottsboro

Lewis E. Sellers, III
M. D.
Birmingham

Wallace Allan Thomas
M. D.
Birmingham

Donald Victor
Unverferth, M. D.
Mobile

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ORTHOPEDIC AND CARDIAC MONITORING
EQUIPMENT AND SUPPLIES

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REPRESENTATIVE AN OPPORTUNITY TO DISCUSS
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BIRMINGHAM HUNTSVILLE MONTGOMERY

Program

of the

48th ANNUAL CONVENTION

of the

WOMAN'S AUXILIARY TO THE MEDICAL ASSOCIATION

of the

STATE OF ALABAMA

Whitley Hotel

Montgomery, Alabama

APRIL 20, 21, 1972

Wednesday, April 19, 1972

12:00-4:00 P. M.

Pre-Convention Registration

Whitley Hotel

Montgomery, Alabama

Archives and Exhibit entries accepted until deadline Thursday, April 20 at 4 p. m. Displays on view and received on 2nd Floor, Whitley Hotel.

12:30 P. M.—Lunch

1:30 P. M.

Pre-Convention Board Meeting

Second Floor, Whitley Hotel

Mrs. Gilder Wideman, Birmingham, President, Presiding

3:00 P. M.

Problems Clinic

5:00 P. M.

Announcements

7:00 P. M.

Loners' Dinner (Dutch Treat)
Elite Cafe, Montgomery, Alabama

Specialty Group Parties

Alabama Thoracic Society, Cocktail Party, 6:30 p. m.; Dinner, 7:30 p. m.

Alabama Orthopaedic Society

Alabama Chapter, American Academy of Pediatrics, Banquet

Thursday, April 20, 1972

8:00 a. m.—Breakfast

Grace—Mrs. Leonard Traveis

Speaker: Sam Eichold, M. D., President Mobile County Medical Society

9:30 a. m.—Opening Session

9:30 a. m. First General Session

Call to Order

Invocation—Mrs. W. R. Sutton

Auxiliary Pledge—Mrs. John Chenault

Welcome—Mrs. Cecil Prescott, President Montgomery-Autauga Auxiliary

1st Report of Credentials Committee

Election of Nominating Committee

Elected Officers Reports (printed)

Adenda: President

President-Elect

First Vice President

NE District Vice President

NW District Vice President

SE District Vice President

SW District Vice President

Recording Secretary

Treasurer

Appointive Officer Reports (Printed)

Adenda: Parliamentarian

Corresponding Secretary

Historian

Finance—Presentation of 1972-1973 Budget

Committee Chairmen Reports (Printed)

Adenda:

ALAPAC

AMAERF

Community Health

Disaster Preparedness and Safety

Fall Conference

Health Careers

International Health

Legislation

Mental Health

Orientation and Program

Public Relations

Radio, TV and Motion Pictures

WAMASA News

WASAMA Advisor

Yearbook

Bylaws—Presentation of Proposed Amendments

Presentation of AMAERF Awards

"A Look at WASAMA"—Mrs. Hugh Ashurst, President, BAMA-WASAMA

Reports of SE District County Presidents

Baldwin—Mrs. C. Longstreet Hamilton

Mobile—Mrs. Leonard Traveis

"Words from Homebase"—Mrs. G. Prentiss Lee, President, AMA Auxiliary

12:30 P. M.—Lunch

Whitley Hotel

Honoring Mrs. G. Prentiss Lee, President of the Woman's Auxiliary to AMA and Mrs. Raymond E. Jones, President of the Woman's Auxiliary to SMA

Speaker: Mr. Winton Blount

2:30 Second General Session

Reports of SE District County Presidents:

Coffee—Mrs. Robert E. Foy, Jr.

Covington—Mrs. C. N. Matthews

Dale—Mrs. George Andrews

Elmore—Mrs. J. E. Dunn, Jr.

Geneva—Mrs. H. A. Childs, Sr.

Houston—Mrs. Curtis L. Adams, Jr.

Lee—Mrs. F. David Druhan

Montgomery-Autauga—Mrs. Cecil Prescott

Pike—Mrs. Chester Beck

Tallapoosa—Mrs. James E. Cameron

"Greetings from Southern"—Mrs. Raymond Jones, President, Woman's Auxiliary to SMA

Reports of NE District County Presidents:

Blount—Mrs. W. R. Sutton

Calhoun—Mrs. C. Neal Canup

Cherokee—Mrs. James H. Burns

DeKalb—Mrs. J. Alex Walker

Etowah—Mrs. Hillman D. Holley, Jr.

Jackson—Mrs. Thomas A. Gibson

Madison—Mrs. Eugene L. Tate

(Continued from Page 723)

Marshall—Mrs. Braxton Smith

Shelby—Mrs. W. E. Stinson

Talladega—Mrs. Donald E. Barlow

Reports of NW District County Presidents:

Colbert—Mrs. John Mims

Cullman—Mrs. John Morris

Franklin—Mrs. R. O. Underwood

Jefferson-Bessemer—Mrs. P. H. Bell

Jefferson-Birmingham—Mrs. Robert D. Guyton

Lamar—Mrs. William Davis

Lauderdale—Mrs. J. Dillard McCown

Marion—Mrs. R. C. Christopher

Morgan-Lawrence—Mrs. Charles H. Burt

Pickens—Mrs. Jon Sanford

Tuscaloosa-Hale—Mrs. John H. Nelson

Walker—Mrs. Gaines W. Keith

Memorial Service by Mrs. Mario A. Accinno

7:00 P. M.

Riverboat Party
Jefferson Davis Hotel

Friday, April 21, 1972

Registration 8 A. M. to 12 Noon

8:00 A. M. Breakfast

Grace—Mrs. Charles H. Burt

"Plans for MASA in 1972-73"—Frank M. Phillippi, M. D., President-elect, MASA

Third General Session

9:00 A. M.

Report of Credential Committee

Election of Delegates to National Convention

Election of Officers for 1972-73

Installation of 1972-73 Officers

Presentation of Past-President's Pin

Inaugural Address

Archives and Exhibits Awards

(Continued on Page 728)

Why you should use a Collection Agency

Consultation regarding Medical Accounts is available in your area. Evaluation of your need is available. A knowledgeable medical collection agency proceeds with discretion and tact in keeping with the dignity of the medical community.

Medical Account Service is presently providing services to over a hundred doctors and hospitals in the Southeast and can assure you of many *"paid in full"* results.

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(TETRACYCLINE HCl, 500-mg capsules)
GETS POINTS FOR LOW COST... SCORES HIGH IN CONVENIENCE

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A division of Pfizer Pharmaceuticals
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Call it what you will, it may be premalignant..

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.



ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

and Efudex® (fluorouracil) 5% cream can resolve it.

Call it actinic, solar or senile keratoses, many regard it as "precancerous."[1,2]

Topical fluorouracil, considered by some dermatologists to be a major advance in the treatment of multiple solar keratoses,[3,4] offers the physician a relatively inexpensive alternative to cryosurgery, electrodesiccation and cold knife surgery. Of the topical fluorouracils available, only Efudex offers 2% and 5% solution and 5% cream formulations—formulations that have proved effective in the treatment of these mutliple lesions.

Usual duration of therapy, 2 to 4 weeks.

Studies showed that with the 2% and 5% Efudex preparations, the usual duration of therapy was only 2 to 4 weeks.[5] Other studies with topical fluorouracil revealed that when concentrations of less than 2% were used, significant numbers of lesions recurred.[6]

Treats the lesions you can't see, too.

Numerous lesions, not apparent prior to 2% and 5% Efudex therapy, manifested themselves by definite reactions, while intervening skin remained relatively unaffected.[5] The early eradication of these subclinical lesions (which may otherwise have undergone further progression) probably accounts for the reduced incidence of future solar keratoses in patients treated with topical fluorouracil—especially with 5% concentrations.[6]

How to identify solar keratoses.

Typically, the lesion—a flat or slightly elevated brown to red-brown papule—is dry, rough, adherent and sharply defined. Multiple lesions are the rule.

Predictable therapeutic response.

The response to a typical course of Efudex therapy is usually characteristic and predictable. After 3 or 4 days of treatment, erythema begins to appear in the area of keratoses. This is followed by a moderate to intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of this response generally occurs two weeks after the start of therapy and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. Lesions that do not respond should be biopsied.

References: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, Grune & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T, and Honeycutt, W. M.: "Treatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *Pharmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, p. 92. 3. Belisario, J. C.: *Cutis*, *6*:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, *97*:14, 1968. 5. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and Klein, E.: *Cancer*, *25*:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

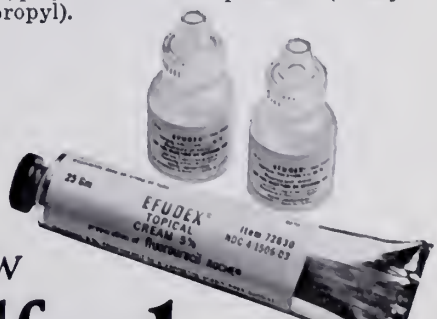
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



now
Efudex®
(fluorouracil)
cream/solution

(Continued from Page 724)

10:00 a. m.—Leadership Training Session
Plans for 1972-73

12:30 P. M.—ALAPAC Luncheon
Ballroom
Jefferson Davis Hotel

Speaker: Hon. Roland Cooper, State Senator

2:30 P. M.—FREE TIME

Resting, Shopping, Touring, "Antiquing."
See Hostess Desk

Map of Historic Interest included

7:00 P. M.
AWARDS DINNER
Ballroom
Jefferson Davis Hotel

Saturday, April 22, 1972
9:00 A. M.

Presentation by the Woman's Auxiliary to the Medical Association of the State of Alabama

1971-1972 Officers

President—Mrs. Gilder L. Wideman
President-Elect—Mrs. George Hansberry
First Vice President—Mrs. Robert W. Grady
Corresponding Secretary—Mrs. Richard A. Dillard
Recording Secretary—Mrs. George Andrews
Treasurer—Mrs. J. P. Brooks
Finance Officer—Mrs. George Scofield
Historian—Mrs. John T. Morris
Parliamentarian—Mrs. John Chenault
NW District VP—Mrs. Donald J. O'Brien
NE District VP—Mrs. Fred C. Ballard
SE District VP—Mrs. J. E. Dunn, Jr.
SW District VP—Mrs. J. Watson Maxwell

Committee Chairmen

ALAPAC—Mrs. Ben H. Johnson
AMAERF—Mrs. Howard C. Johnson
Bylaws—Mrs. Robert K. Wilson, Sr.
Community Health—Mrs. Lewis Young
Convention Chairman—Mrs. Charles H. Smith
Disaster Preparedness and Safety—Mrs. H. Price Edwards
Health Careers—Mrs. Herbert Kinsey
International Health—Mrs. Robert Boon
Legislation—Mrs. James K. V. Willson
Co-Chairman—Mrs. H. A. Pinkerton
Membership—Mrs. Robert W. Grady
Memorial—Mrs. M. A. Accinno
Mental Health—Mrs. Robert Tourney
Orientation and Program—Mrs. Aubrey W. King
Public Relations—Mrs. Charles Howell
Radio, TV and Motion Pictures—Mrs. William G. Rosser
Rural Health—Mrs. John H. Campbell
WAMASA News—Mrs. William L. Smith
WASAMA Advisor—Mrs. Oscar Dahlene, Jr.
Yearbook—Mrs. Curtis A. Smith
Fall Conference—Mrs. William J. Foft

STATE CONVENTION COMMITTEES

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Mrs. Charles H. Smith, Montgomery

CO-CHAIRMAN
Mrs. Gene Parker, Prattville

ARCHIVES & EXHIBITS
Mrs. Archie Thomas and Mrs. Luther L. Hill

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Mrs. Jack Evans

PRESS AND PUBLICITY
Mrs. William L. Smith

RESERVATIONS
Mrs. Will Chambless

Cover Design by Mrs. Leon Rosen, Montgomery

Acknowledgements:

The Woman's Auxiliary gratefully acknowledges assistance from: Anne Tidmore, Flags

PLACEMENT SERVICE

(Continued from Page 747)

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11

Opportunity for associate in general practice or take over general practice in town of 1,200 population in south central Alabama with trade area of 5,000 population. Well established practice and well equipped office. Located near recreational area. PW-1/12

Opportunity in town of 3,000 population in trade area of 15,000 located in West Alabama. Clinic building available with equipment. Farming and several small industries. Several schools and churches. PW-1/13

Montgomery's got it.
The Governors House Rotunda Restaurant.
Recommended by "Gourmet".



GOVERNOR'S HOUSE MOTEL SOUTHERN BY-PASS MONTGOMERY, ALABAMA PHONE 205/288-2800

AMA Policy

The American Medical Association has recently published a compilation of policy positions relating to the practice of medicine. The Journal will publish these policies each month as space permits.

It is suggested that physicians clip and file them for future reference.

Group Practice

"It is within the limits of ethical propriety for physicians to join together as partnerships, associations, or other lawful groups provided ownership and management remains in the hands of licensed physicians." (Dec. 1957)

The AMA supports a pluralistic approach to the delivery of medical services, whether they be furnished by group practice, or by the individual practitioner. (Testimony before the Senate Finance Committee, Sept. 23, 1970, by William O. LaMotte, Jr. M. D.)

The AMA continues to espouse the private, fee-for-service practice of medicine and "strongly disapproves" of the provision of funds by the federal government for subsidizing any one form of organization of medical practice. (June 1968)

Group practice is the formal organization of three or more physicians to provide medical care, through the joint use of equipment and personnel, with the resulting income distributed in accordance with methods previously determined by members. (Group Practice: Guidelines to Joining or Forming a Medical Group)

Closed panel prepayment, or prepaid group practice is the combination of group practice with an insurance plan. Prepayment groups contract either directly or through a third party to provide medical care to a group of subscribers on a non-fee-for-service basis. Subscribers are assessed a fixed premium whether or not they subsequently require a physician's services. (AMA Department of Health Care Organization)

Health Care A "Right"

The AMA reaffirms that "It is the basic right of every citizen to have available to him adequate health care. The medical profession, using all means at its disposal, should endeavor to make good medical care available to each person." (June 1970)

Health Care Costs

In 1968, 70 per cent of the Medicaid dollar went for care in hospitals and nursing homes; 11 per cent for physician services; seven per cent for prescribed drugs and pharmacy; and 12 per cent for other dental, professional and health services. (Reference Data on Socio-economic Issue of Health: 1971)

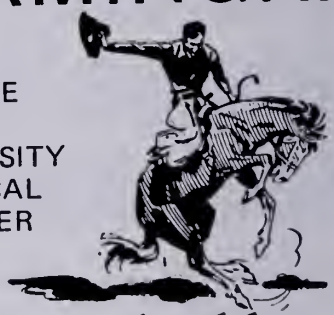
Between 1965 and 1968 the costs of hospital care rose 13.9 per cent; physician's fees rose only 6.1 per cent. (The Size and Shape of the Medical Care Dollar; HEW: 1969)

The "high cost" of health care has come

(Continued on Page 734)

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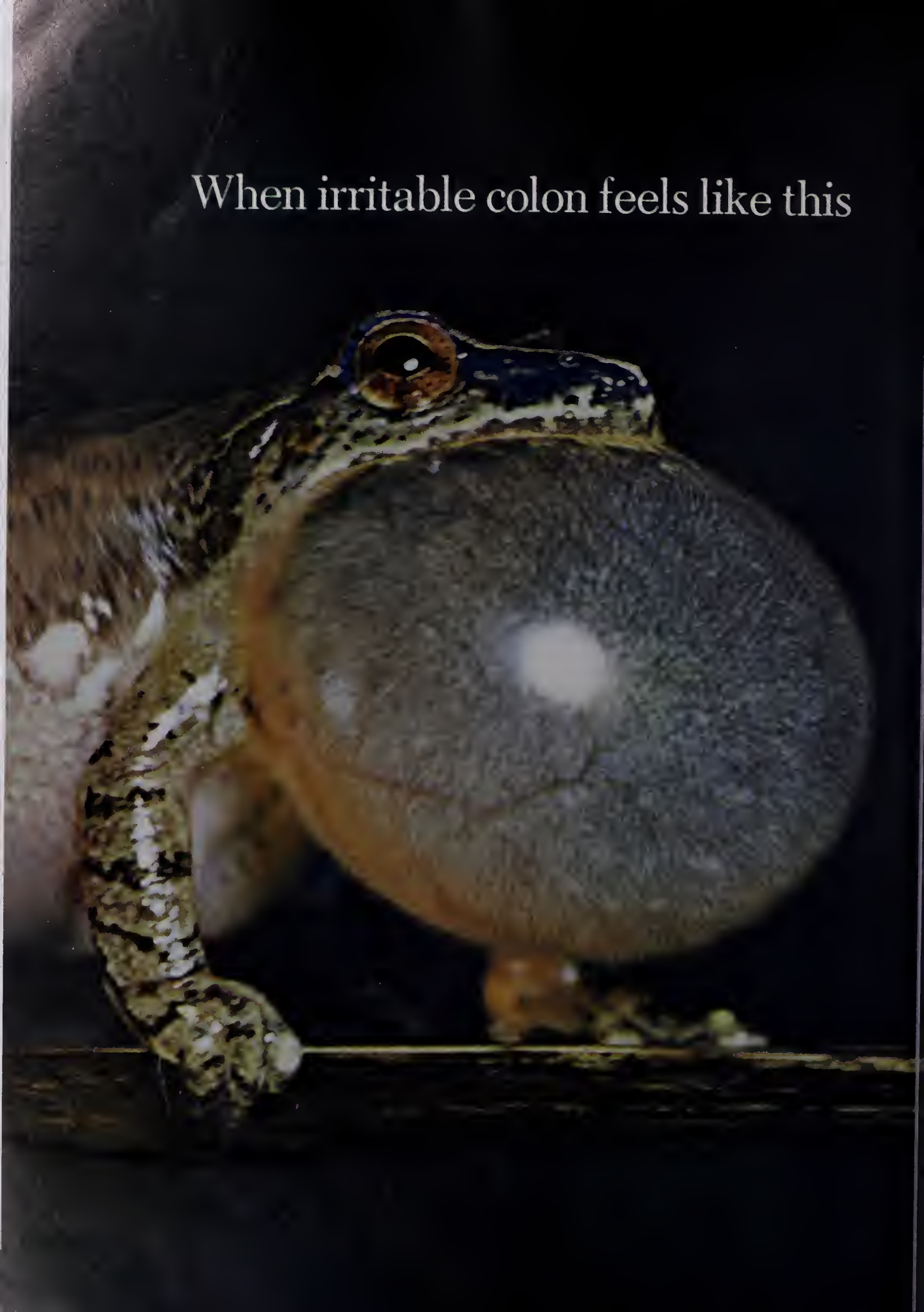
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Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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to move,
and the Latin **sedatus,**
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Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

(Continued from Page 730)

about primarily because of legislation, cost of living increases and improvement in life saving capacity due to costly modern technology and is due in only small part to increased charges for physician services. The AMA will accumulate factual data which will make this clear and disseminate the information to the public. (June 1970)

The AMA reiterates its support of existing mechanisms such as public grievance and adjudication committees and utilization and peer review committees, as most appropriate and effective for the consideration of fees and the costs of medical and related care. (June 1970)

Health Care For The Needy

The AMA is committed to the long-standing principle of high quality medical care for all people and to the policy that government programs should be designed to help those who need help.

"It is the basic right of every citizen to to have available to him adequate health care. The medical profession, using all means at its disposal, should endeavor to make good medical care available to each person". (June 1970)

The Association is securing data on the adequacy of health services in rural and underprivileged areas. It will devise delivery systems consonant with its principles, and provide incentives for physicians to settle in medically deprived localities. (June 1970)

The AMA has a strong commitment to improve the health care of the poor. This includes activities in the fields of health manpower, health care financing, health care delivery, environmental health, health education and mental health. (June 1970)

The principle of graduated income tax credits for premiums paid for adequate health insurance is approved policy of the AMA. (June 1968)

The AMA encourages the implementation of the Title XIX programs. (Medicaid) (Nov. 1967)

Health Care In Rural Areas

The AMA, through its Council on Rural Health, serves to identify and seek solutions to health problems in rural areas. Experience indicates that no one approach will solve the health needs of every community, but some solutions can be developed and adapted from various models of health care delivery being carried out throughout rural America. Rural commmunities have a responsibility for health planning, securing a data base that includes information on health facilities and manpower available, developing criteria for measurement of health services, and providing health education with emphasis on utilization of health services by its citizens.

While medical solutions are being sought for rural health problems, it is believed that the root causes to these problems—largely socio-economic in character—should be identified and, where possible, resolved. (Secretary of the Council on Rural Health, April, 1971)

Health Insurance

The AMA strongly opposes federally-controlled compulsory national health service programs. (Dec. 1970)

The principle of graduated income tax credits for premiums paid for adequate health insurance (Medicredit), is approved policy of the AMA. (June 1968)

The AMA endorses voluntary health insurance coverage for outpatient X-ray and laboratory services acceptable to the hospital and its medical staff wherever performed prior to a scheduled hospital admission and will work actively to make this form of coverage universal. (June 1968)

Health Maintenance Organizations (HMOs)

The AMA supports a pluralistic approach to the delivery of medical services, whether they be furnished by group practice, or by the individual practitioner, or otherwise. However, before any HMO program is initiated nationwide, we believe that cost and utilization data should first be developed with controlled demonstrations testing the capability of such a program to assure Medicare patients will uniformly receive the best quality care.

The HMO should be under the direction and supervision of physicians. State and local medical societies and medical foundation should be given the opportunity to qualify for such an organization. (Testimony before the Senate Finance Committee, Sept. 23, 1970, by William O. LaMotte, Jr., M. D.)

Hyperkinetic Children

Mood-modifying drugs (such as Ritalin) are useful in the symptomatic treatment of hyperkinetic and perceptually handicapped children, but their administration should be preceded by a careful clinical evaluation. Short-term trials of these drugs are justified as an adjunct to remedial methods of education but use for prolonged periods should await further evaluation. (Council on Drugs, Nov. 11, 1968)

Infant Mortality

The AMA will make a detailed analysis of the registration of births and deaths in each of those nations that are alleged to have a lower rate of infant mortality than that of the U. S. It will compare these reporting requirements with those of the U. S. and

(Continued on Page 738)

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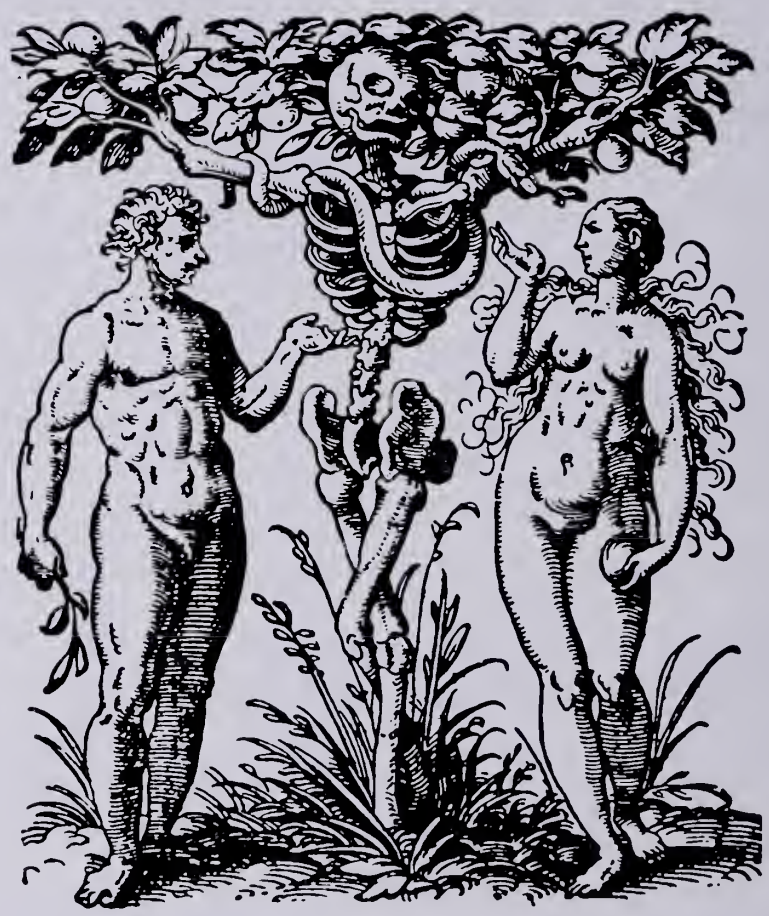
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In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when recanstituted with diluent.

An aminocyclitol ontibiotic active *in vitro* against mast strains of *Neisseria ganarrhaeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shawn no cross resistance of *N. gonarrhaeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. ganarrhoeae.*

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea moy mask
delay the symptoms of incubating syphilis. Potients should b
corefully examined and monthly serological follow-up for
least 3 months should be instituted if the diagnosis of syphilis
suspected.

*Safety for use in infants, children ond pregnant women hos no
been estoblished.*

Precautions: The usuol precautions should be observed wit
otopic individuals. Clinical effectiveness should be monitored t
detect evidence of development of resistance of *N. ganarrhaea*

Adverse reactions: The following reactions were observe
during the single-dose clinical trials: soreness ot the injection site
urticaria, dizziness, nausea, chills, fever and insomnia.
During multiple-dose subchronic toleronce studies in norma
humon volunteers, the following were noted: a decrease in hemo

Trobicin®

sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

High cure rate:* 96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

*Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhaeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included. JA72 1848 6

globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhaeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.
For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LWB)

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

(Continued from Page 735)

broadly disseminate the results of this analysis. (June 1970)

Unfavorable environmental and socio-economic factors are involved in infant mortality. The medical profession should support community efforts to improve living conditions among the needy and inaugurate programs of health education, including good maternal and child health practices, family life and sex education and the appropriate use of health care resources. (June 1968)

BACKGROUND INFORMATION:

The provisional 1970 infant mortality rate is now 19.8 per 1,000 live births. This is down 4.3 per cent from the previous low established in 1969. Since 1950 the infant mortality rate in the U. S. has decreased by 32 per cent. (National Center for Health Statistics of the Health Services and Mental Health Administration, March 22, 1971)

Malnutrition In The U. S.

The existence of hunger in a society that can afford to abolish it is morally and economically indefensible. Malnutrition may be just as damaging to the nation as to the individual.

Hunger, per se, is a problem which society itself must solve. While it has a medical component, it is not a problem of direct responsibility to the medical profession.

Malnutrition, on the other hand, is a medical problem that can most appropriately be resolved by intervention of the physician. At a local level it will become increasingly important for the physician to involve himself in community affairs that pertain to the resolution of hunger and malnutrition. (Report of the Council on Foods and Nutrition Dec. 1969)

Manpower-Physicians

Shortage of health services and personnel is **not** merely due to an insufficient number of health professionals across-the-board. Maldistribution of practitioners geographically by profession, and by specialty is an equally important factor in depriving communities of an adequate supply of health services. (June 1970)

The AMA and the Association of American Medical Colleges join in endorsing the position that "all medical schools should now accept as a goal the expansion of their collective enrollments to a level that permits all qualified applicants to be admitted." (Press Conference, March 5, 1968)

Demand is likely to increase in spite of the record production of physicians because of greater population and income; wider insurance coverage; increasing public interest; more government programs. (June 1966 and Nov. 1967)

The AMA "has no desire to limit the production of properly trained physicians." The policy of the AMA is to encourage creation of new facilities or expansion of existing facilities. "The number of students admitted is determined by each school." (June 1951)

Manpower-Physician Assistants

The AMA is dedicated to exploring and developing expedients to overcome health manpower shortages. (June 1970)

The Association recommends all licensing of any additional allied health occupations be delayed until long-range solutions are developed. Such delay is advisable in order to forestall perpetuating a system of narrowly defined, legally circumscribed health service roles, and permit time for coordinated development of practical alternatives. (Dec. 1970)

A physician's assistant is: "a skilled person qualified by academic and practical

(Continued on Page 740)



The Bradley Center --- for the problems of living

An all new homelike open psychiatric residence on a lovely five-acre tract, centrally located within the community, providing a comprehensive range of continuous services, including in-patient, day care, and outpatient treatment. Each patient participates in an extensive and intensive treatment program, based almost exclusively upon multiple psychotherapeutic encounters. These include individual psychotherapy, group psychotherapy, the nursing milieu, occupational therapy, recreational therapy, topical small group discussions, and other group activities in the Center, as well as in the community, depending on individual needs and interests. Medications are prescribed when appropriate.

Any individual may be admitted who, in the opinion of the medical staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible family member.

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Leonard T. Maholick, M. D.
Medical Director

Maj. Gen. (ret.) Howard Snyder
Administrator

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(Continued from Page 738)

training to provide patient services under the supervision and direction of a licensed physician who is responsible for the performance of that assistant." (Dec. 1970)

MD Ownership Of Drugstores Or Hospitals

The profession is better served when physicians avoid any appearance of compromise with the Principles of Medical Ethics by limiting their financial investments to fields completely unrelated to medicine or the health care industry. (Judicial Council, June 1970)

It is not unethical in itself for a physician to own interest in or own outright a for-profit hospital, but the use the physician makes of this ownership may be unethical. He has an ethical obligation to inform each patient he sends to such a hospital of his interest or ownership. (Judicial Council, June 1970)

It is unethical for a physician to have a financial interest in a drug repackaging company or to own stock in a pharmaceutical company which he can or does control while actively engaged in the practice of medicine. (June 1966)

Medicare

The AMA urges Congress to exclude chiropractic services, and services of optometrists (except as now provided) under the term of "physicians" from all federally-assisted health care programs. (Dec. 1970)

During 1965-66 many individuals represented the AMA and the physicians of the U. S. by meeting frequently with officials of the Department of HEW. This should be viewed as a recognition by responsible citizens of an obligation to obey the law of the land, including this law with which the AMA disagrees. The purpose of the AMA has been to provide expert assistance to the government so that the law could be implemented in a manner most helpful to the beneficiaries and least disturbing to the practice of medicine. (June 1966)

Medicaid

Title XIX embodies many long-standing policies of the AMA in regard to financing health care of the needy or near-needy. Eligibility is based on need, determined at the local level and by state-established standards. The AMA encourages the implementation of Title XIX programs. (June 1967)

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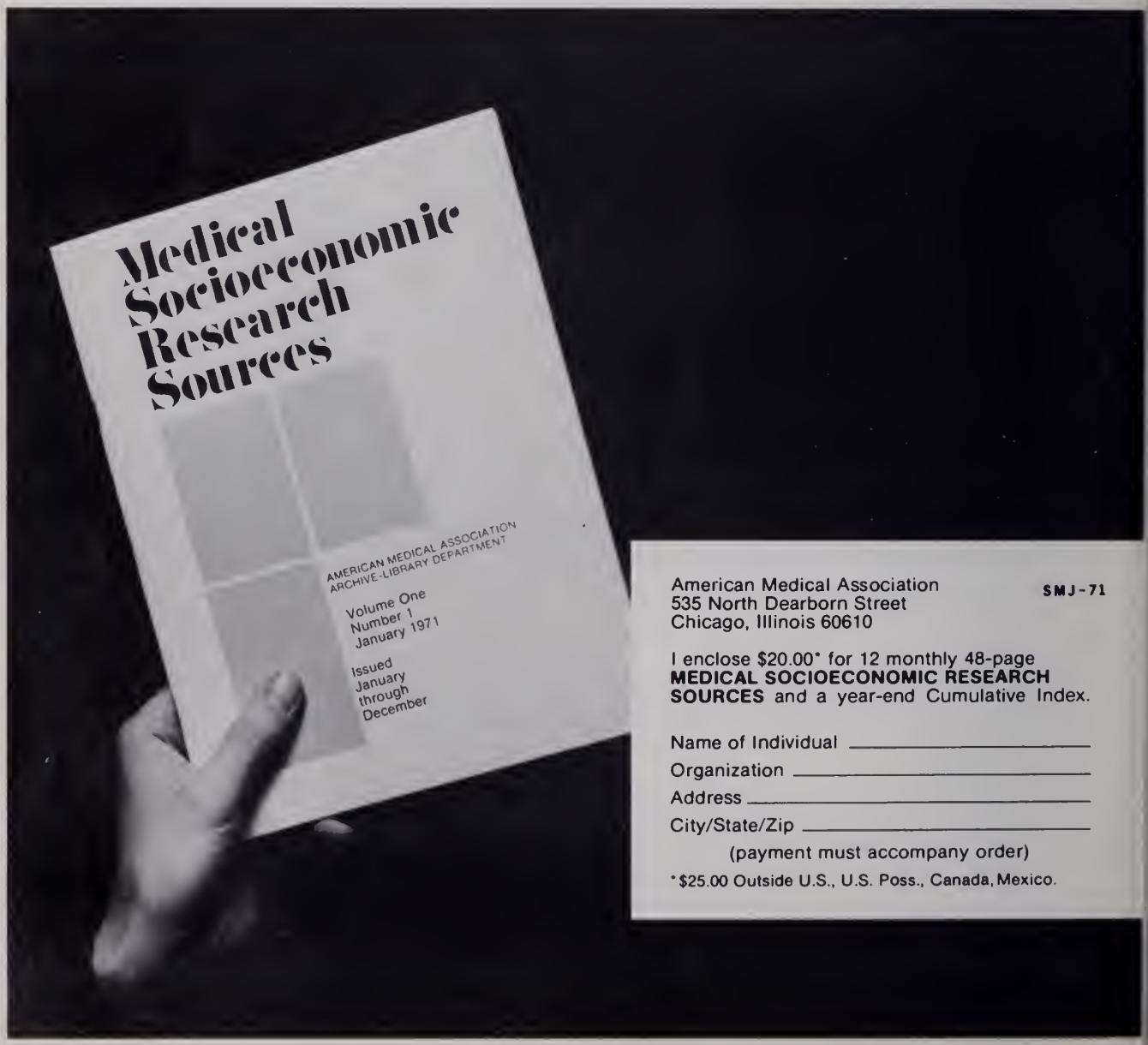
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Quality Control

Health care planners, third party payers, and divers segments of the general public have recently been clamoring for quality control in the delivery of medical care. Many people do not seem to be aware of the massive system of guidance, restraint, and discipline that now governs the medical profession. At present, evaluation of medical practice is carried out by the doctor himself, by his patients, by fiscal intermediaries, by hospital administrations, by the organized profession to a huge extent, by the courts to a certain degree, by all levels of government, and even by a computer in Ann Arbor.

The quality control of medical care begins with the efforts of the medical schools' Admissions Committees to select the best qualified applicants. It is continued during the training of doctors in medical school, during their internship, and in the residency training period. This area, medical education, is probably the most critical in insuring high quality medical care.

* * *

State licensure authorities, specialty board examiners, other specialty organizations, and the A. A. G. P. are all looking at the doctor in practice. He himself maintains quality care by expanding his knowledge and skills in hospital rounds and conferences, teaching assignments, meetings at all levels from local to international, post-graduate courses, and even formal personal critiques such as the A. C. P.'s Self-Assessment Test.

The hospitals have an exhaustive array of checks on the quality of medical practice. Consider the doctor's appraisal by the Credentials Committee prior to his appointment, by the Utilization Review Committee, the Record Committee, the Tissue Committee, the record librarian, PAS and MAP, etc. Consider his continued evaluation by the Chief of Service, the house officers, the pathologist who autopsies his unsuccessful cases, the consultants he calls in, the colleagues who cover for him. Death conferences and ward rounds expose his practice to other doctors. Insurance companies and government agencies scrutinize his behavior. Hospital accreditation authorities are interested in him. Group practice, cross-coverage, and consultations provide some surveillance of office practice.

* * *

Patients play a part in quality control. Although unsophisticated and subject to error, their ability to select their doctor is a factor in some aspects of quality. Malpractice suits, disciplinary actions by the Medical Society Ethics Committee, and the influence of Grievance Committees have a role.

* * *

New technics of quality control are being spoken about for the future. Peer Review Committees have recently come into being, and will soon be ubiquitous. Recertification by state licensure boards and specialty-accrediting organizations is in the offing. When a practicable system is developed, auditing of doctors' offices will undoubtedly be undertaken. Only doctors can evaluate the quality of medical care, and the medical profession must take the lead in perfecting these and other technics of quality control.

Reprinted from Worcester Medical News, November-December, 1971.

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A single-dose, non-staining anthelmi

...is pinworms...



with just one non-staining dose of Antiminth (pyrantel pamoate) Oral Suspension.

Highly effective. Active against pinworm...and roundworm.

Non-staining. Doesn't stain teeth or oral mucosa on ingestion. Doesn't stain stools, clothing or linen.

Simple dosage. Single-dose regimen: 1 cc. per 10 lbs. of body weight (1 tsp. per 50 lbs.).

Well-tolerated. Based on pre-introductory studies.

Pleasant-tasting. Easy-to-take, caramel-flavored oral suspension.

Economical. One prescription for the entire family.

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia

Skin reactions: rashes.

Dosage and Administration. *Children and Adults* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg /lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight (One teaspoontul = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml., supplied in 60 cc. bottles.

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(pyrantel pamoate)
ORAL SUSPENSION

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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

Anesthesiology—

Age 36; University of Illinois, 1959; seeking group practice; Available December 24, 1971. LW-2/5

General Practice—

Age 49; University of Pittsburgh, 1951; seeking group or industrial practice. LW-3/1

Age 27; George Washington University 1969; National Board. LW-3/2

Internal Medicine—

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Age 31; University of Chicago, 1967; National Board; seeking group or associate practice; would prefer to work primarily as a general internist and part-time as an autopsy pathologist. Available July 1972. LW-13/7

Age 31; University of Kentucky, 1966; seeking group practice; Board eligible; Available July 1972. LW-4/11

Age 31; Ohio State, 1965; Board certified; seeking group practice; Available July, 1972. LW-4/12

Age 29; National University of Mexico, 1966; seeking group or institutional practice; Available July 15, 1972. LW-4/13

Obstetrics-Gynecology—

Age 49; Marquette University, 1945; Board certified; seeking institutional practice. LW-15/1

Cphthalmology—

Age 35; Louisiana State University, 1963; Board eligible, seeking group or associate practice. Available January 1972. LW-6/3

Age 30; Yale University School of Medicine, 1965; National Board; Board certified; Available April 1, 1972. LW-6/5

Age 31; Chicago Medical School, 1966; National Board; seeking associate or group practice; Available July, 1973. LW-6/6

Orthopedic Surgery—

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Age 31, Temple University, 1965; National Board; seeking group or associate practice. Available July 1972. LW-14/2

University of Illinois, 1965; National Board; seeking group or associate practice. Available July 1, 1972. LW-14/3

Otolaryngology—

Age 32; Temple University, 1965; National Board; Board eligible; seeking solo or group practice; Available August 1972. LW-16/1

Pathology—

Age 39; Ankara Medical School, Turkey, 1956: Board eligible; seeking associate practice. LW-8/2

Age 33; University of Texas, 1965; National Board; Board certified; seeking group or associate practice; Available September 1, 1972. LW-8/7

Age 31; University of Kansas Medical Center, 1965; Board certified; seeking solo, associate, or group practice; Available June 12, 1972. LW-8/8

Radiology—

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 31; Medical College of Georgia, 1966; National Board; Board certified; seeking group practice; Available August 1, 1972. LW-10/6

Age 31; University of Iowa, 1966; seeking assistant or associate practice; Available October 1, 1972. LW-10/8

Age 32; Louisiana State, 1966; Available September 1, 1972. LW-10/9

Surgery—

Age 33; University of Maryland, 1965; seeking solo, group, or associate practice; Available July 1973. LW-11/7

Age 33; University of Tennessee, 1967; seeking practice in General Surgery. Available July 1972. LW-11/8

Age 48; Duke University, 1947; National Board; Board certified; seeking group practice in general surgery; Available July 1, 1972. LW-11/9

Age 39; Creighton University School of Medicine, 1957; National Board; Board certified; seeking associate or group practice; Available June, 1972. LW-11/10

Age 40; Harvard, 1957; National Board; Board certified; seeking solo, associate, group or institutional practice. LW-11/11

Age 34; New York University School of Medicine, 1964; National Board; Board certified; seeking solo, associate, group or institutional practice; Available July 1, 1972. LW-11/12

Urology—

Age 34; Medical College of Georgia, 1967; seeking group or associate practice; Available July 1972. LW-12/1

Age 32; Tulane University School of Medicine, 1964; seeking solo, group, or associate practice; Available April 1972. LW-12/2

Age 31; Northwestern University, 1965; seeking associate or group practice; Available July 1, 1972. LW-12/3

Physicians Wanted

Special Openings—

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

Wanted, internists, generalists, radiologist, orthopedist, general surgeons, town of 15,000 population in county of 45,000 population in southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-17

Wanted: Immediately. Pediatrician to replace recently deceased partner in northeast Alabama. Enter busy practice in a predominantly GP area. Enjoy rural, quiet living with nearby scenic and recreational facilities. Salary, practice, everything negotiable. PW-19

Physician wanted. Student Health Service, University of Alabama. Eight full-time physicians. New facility. Competitive salary. Liberal vacation. Excellent fringe benefits. PW-20

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

(Please turn to Page 729)

When you prescribed Orinase®

(tolbutamide, Upjohn)

14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures nece: ar for optimal control with insulin are also necessary with Ori se The patient on Orinase must be fully instructed: abou' h nature of his disease; how to prevent and detect complicat ns how to control his condition; not to neglect dietary restrict ns develop a careless attitude or disregard instructions relati t body weight, exercise, personal hygiene, and avoidance c n fection; how to recognize and counteract impending hyp ly cemia; how and when to test for glycosuria and ketonuria; o to use insulin; and to report to the physician immediately h does not feel as well as usual.

Caution, very close observation, and careful adjustme c dose are necessary when: insulin is withdrawn during the e period in order to avoid ketosis, acidosis, and coma; thia d diuretics are administered which may result in aggravatic c diabetic state and increased tolbutamide requirement, te sc rary loss of control, or even secondary failure; treating pat nt with impaired hepatic and/or renal function and debilitated, a nourished, or semistarved patients in order to avoid severe h c glycemia which may require corrective therapy over se ra days; and treating patients with severe trauma, infection, or u gical procedures where temporary return to insulin or adc o of insulin may be necessary. Response to tolbutamide is d n ished in patients receiving therapy with beta blocking ag ts

As some diabetics are not suitable candidates, it is esse le that the physician familiarize himself with the indications, l of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, n during the initial test period should communicate with the p s

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On the one hand, you know that diet d weight control are the initial and essential ındations for the management of adult-set, non-ketotic diabetes. When these easures prove satisfactory, no additional erapy is indicated. On the other hand, you ow that if these measures fail the addition of Orinase to the regimen can often help lower blood sugar. Orinase lowers blood sugar as effectively today as it did when you first prescribed it.

You also know the importance of close monitoring of the patient. Although uncommon, severe hypoglycemia may occur if the dosage is not tailored to suit his requirements.

In short, Orinase is a drug you're familiar with, and probably have confidence in.

And that may be the best recommendation Orinase can have.

Orinase®

0.5 g. tablets

(tolbutamide, Upjohn)

an daily, and during the first month report at least once weekly r physical examination and definitive evaluation. After a month, aminations are recommended monthly or as indicated. Appearance of ketonuria, increase in glycosuria, unsatisfactory wering or persistent elevation of blood sugar, or failure to otain and hold clinical improvement indicate nonresponsiveness to Orinase (tolbutamide). Orinase does not obviate need for aintaining standard diet regulation. Uncooperative patients ıould be considered unsuitable for therapy. Prescriptions should e refilled only on specific instruction of physician. In treating ild asymptomatic diabetic patients with abnormal glucose lerance, glucose tolerance tests should be obtained at three- six-month intervals. Orinase is not an oral insulin or a substite for insulin and must not be used as sole therapy in juvenile iabetes or in diabetes complicated by acidosis or coma where sulin is indispensable.

If phenformin is prescribed in combination with Orinase, appropriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, ıay occur and may mimic acute neurologic disorders such as erebral thrombosis. Certain factors such as hepatic and renal isease, malnutrition, advanced age, alcohol ingestion, and drenal and pituitary insufficiency may predispose to hypoglyemia and certain drugs such as insulin, phenformin, sulfonaıides, oxyphenbutazone, salicylates, probenecid, monamine xidase inhibitors, phenylbutazone, bishydroxycoumarin, and henyramidol may prolong or enhance the action of Orinase and ıcrease risk of hypoglycemia. Orinase long-term therapy has een reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: *0.5 g. Tablets*—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

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Alabama Health Facilities Qualify for HUD Funding

Privately owned hospitals, nursing homes and group medical practice facilities can be financed with loans insured by the Federal Housing Administration under programs of the U. S. Department of Housing and Urban Development.

Recently the HUD Area Office in Birmingham conducted a seminar on these Federal assistance programs. Jon Will Pitts, Area Director of HUD, reported that although these programs have been on the books for several years only two hospitals and seven nursing homes have qualified in Alabama, while in Florida and other adjacent states numerous projects are financed and constructed with FHA-insured loans. "Our agency can insure long term loans of up to $50 million for proprietary or privately owned non-profit hospitals at 7 per cent interest. In Florida there are 11 such hospitals under construction at this time involving FHA-insured loans exceeding $170 million. "Publicly owned hospitals do not qualify under these programs," said Pitts, "as they have advantages of the Hill-Burton Act and related HEW programs. FHA's programs relate solely to the private sector."

Alabama mortgage bankers attending the seminar assured the Area Office that funds are available for making such FHA-insured loans in Alabama. Anyone interested in such programs should contact Peter W. Field, Director of Production, U. S. Department of HUD, Daniel Building, 15 South 20th Street, Birmingham, Alabama, or any of the following mortgage banking firms: Cobbs, Allen & Hall Mortgage Company, Birmingham; Engel Mortgage Company, Birmingham; Jackson Company, Birmingham; Molton, Allen & Williams, Inc., Birmingham; Ballard Mortgage Company, Inc., Montgomery.

Electrocardiography

The Division of Continuing Medical Education, the Cardiology Division of the Department of Medicine and the Cardiovascular Research and Training Center will sponsor a two-day course entitled "Contemporary Electrocardiography in Clinical Practice," October 19-20, 1971. It will be held in the auditorium of the Veterans Administration Hospital in Birmingham, and there will be a registration fee of $30. A feature of the course will be the opportunity for self testing by the participant following each section of the course. Some of the presentations are: "A Clinician's View of Contemporary Electrocardiography," "Pathology and Treatment of Atrial Arrhythmias," "Atrioventricular Block," "Arrhythmias in Acute Myocardial Infarction," "Arrhythmias and Conduction Disturbances Associated with Open Heart Surgery."

Registrations may be sent to Dr. Margaret S. Klapper, Director, Division of Continuing Medical Education, University of Alabama School of Medicine, 1919 7th Avenue South, Birmingham, Alabama.

50-Year-Club Member Home Again From Distant Places

By no stretch of the imagination could Harold Ewart Simon, M. D., of Birmingham —eleventh and last in the roll call of Alabama doctors eligible this year for MASA's 50-Year Club—be labeled average.

Born in Pennsylvania 75 years ago month after next (May 27), he is a past president of the Jefferson County Medical Society (1957), a "confirmed" bachelor at the age of 53 and a bridegroom at the age of 54; he is one Alabama physician who looks back on a mild CVA (cardiovascular accident) as a fortunate event that forced his retirement and permitted pusuit of a happy hobby.

He was the subject of a Journal hobbies feature 16 months ago, richly illustrated with the results of his twin enthusiasms—travel and photography. And they are enthusiasms shared by his wife of 20 years, the former Regina Pessemier of Saint Marys, Kansas.

A Presbyterian born in the Quaker State, he earned his M. D. degree at the University of Pittsburgh in 1922, interned for five years at Mayo, earned his M. Sc. in Surgery at the University of Minnesota in 1928, and the following year moved south to Birmingham, months ahead of the market collapse and the start of the Great Depression.

He served his country as a private in World War I and came out of World War II with the silver oak leaves of a lieutenant colonel on his collar. It was in the latter conflict, on a tour of duty in Kansas, that he met his future bride.

Although he had fully intended retiring on his 65th birthday, as that time approached (in 1962), he realized it would be "extremely difficult just to put on my hat and walk away from a busy practice, still in the best of health." His CVA saved him that embarrassment.



DR. HAROLD E. SIMON

Since the hobbies article about him, the Simons have been on another globe-girdling adventure that carried them to Kenya, to Yugoslavia and to Italy's Sicily. Out of this came a picture of Mount Kilimanjaro, used as a cover picture for "International Wildlife," and a series of pictures of the active lava flow from the mouth of Mount Etna, the latter obtained after a six-mile midnight jeep trip up the mountain slopes.

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It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

nfections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatmer *Skin and mucous membranes*—Skin rashe urticaria, vaginitis, and rare instances of e foliative and vesiculobullous dermatitis ha been reported. *Liver*—Although no direct r lationship to liver dysfunction is establishe jaundice and abnormal liver function tes (particularly serum transaminase) have bee observed in a few instances. *Cardiovascul*—Instances of hypotension following pare teral administration have been reporte particularly after too rapid IV administr tion. Rare instances of cardiopulmonary a rest have been reported after too rapid I administration. If 4.0 grams or more admi istered IV, dilute in 500 ml of fluid ar administer no faster than 100 ml per hou *Special senses*—Tinnitus and vertigo hav been reported occasionally. *Local reactio*—Excellent local tolerance demonstrated intramuscularly administered Lincoci (lincomycin hydrochloride). Reports of pai following injection have been infrequen Intravenous administration of Lincocin i 250 to 500 ml of 5% glucose in distille water or normal saline has produced n local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 m* Capsules—bottles of 24 and 100. *Steri Solution, 300 mg per ml*—2 and 10 ml via and 2 ml syringe. *Syrup, 250 mg per 5 m*—60 ml and pint bottles.

For additional product information, consu the package insert or see your Upjoh representative.

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Older People Reported To Face Major Illness Better

"Older people appear to cope better than younger ones with the isolation, loneliness and alienation which accompany catastrophic illness," according to Dr. Leslie S. Libow, chief of Geriatric Medicine at Mount Sinai City Hospital Center at Elmhurst.

"Being older in America, even if healthy, prepares you fairly well for the isolation that often comes with a catastrophic illness."

Dr. Libow made these remarks before a group of 500 professionals in the medical, legal, religious and social service fields.

Isolation was considered as a major problem for some patients by the professionals—isolation reflecting breakdown in family communication, the "exile" of institutional care, fear of rejection because of post-surgical complications or disfigurement, and loss of voice or intellectual impairment.

Adopting the broad definition of catastrophic illness as a combination of physical, psychological and social disorders which the person is unable to cope with, professionals in various fields reported that they were heartened by changes taking place which indicated more sensitivity to the patient's needs as a person.

Underscoring the new trend was a study reporting five emotional stages experienced by patients who knew their diagnosis to be a terminal illness. Presented by Dr. Elisabeth Kubler-Ross, medical director of S. Cook County Mental Health and Family Services of Chicago, they are as follows: first, shock and denial; second, anger, rage and resentment; third, bargaining; fourth, depression; and fifth, acceptance.

"When the patient and his loved ones can be helped to understand and cope with these stages together," Dr. Ross said, "Death can be made more acceptable and peaceful for all those who are involved."

Cancer Care's Social Service Director, Ruth Michaels, stressed that the impact on the family had to be considered. "The illness and threat of death are the patient's alone, but the prospect of loss and bereavement, as well as emotional and financial disaster, are also the family's."

Grief and bereavement was regarded as a "normal and healthy" expression of feeling in both the dying patient and the family.

"What the grieving individuals do about the possessions of the individual who has died may serve as an indication of how the grief process is proceeding," according to Dr. Arthur H. Schmale, associate professor of Psychiatry and Medicine, School of Medicine and Dentistry and Strong Memorial Hospital at the University of Rochester.

"There are some who cannot bear to touch a single article of clothing or any material possession—everything has to remain as it was, even one year later." Such a reaction, Dr. Schmale considered "an arrest in the grieving process at a very primitive level."

He pointed out that several studies have reported an increased death rate among close relatives during the first year of bereavement when compared with control groups. "The increase in risk is reported to be highest for the widowed and, in particular, during the period of the first six months following the loss."

A religious leader said, "One of our difficulties perhaps, as compared with other cultures, is that we tend not to have acceptable approved ways of working out our bereavement." This was a conclusion of the Rev. John D. Logan, O. P., assistant clinical director of the Graduate Division of Pastoral Counseling at Iona College, New Rochelle, New York.

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include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
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For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • April, 1972 • No. 10

Office of Publication
19 So. Jackson St. .... Montgomery, Ala. 36104
Subscription Price ..... $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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nportant Note: This drug is not a simpla analgasic. 'o not administer casually. Carafully evaluate patients afora starting treatment and kaep them under closa upervision. Obtain a datailad history, and complata hysicel and laboratory axamination (completa amogram, urinalysis, atc.) bafora prescribing and at equant intervals theraaftar. Carafully salact patiants, volding thosa responsiva to routina maasures, con-raindicated patiants or thosa who cannot ba observed requantly. Warn patiants not to excaad recommended osega. Short-tarm ralief of savara symptoms with ha smallast possibla dosega is tha goal of tharapy. Dosaga should be takan with maals or a full glass of nilk. Petients should discontinua tha drug and raport mmediately any sign of: faver, sora throat, oral esions (symptoms of blood dyscrasia); dyspepsia, pigastric pain, symptoms of anamia, black or tarry tools or othar avidanca of intastinal ulcaration or amorrhaga, skin raactions, significant weight gain or dame. A ona-waak trial pariod is adaquata. Discon-inua in tha absanca of a favorabla responsa. Rastrict raatment pariods to ona waak in petients ovar sixty. *ndications:* Acuta gouty arthritis, rhaumatoid arthritis, haumatoid spondylitis.

Contraindications: Children 14 years or lass; sanila patiants; history or symptoms of G.I. inflammation or ulceration including savara, racurrent or persistant lyspepsia; history or presence of drug allargy; blood lyscrasias; renal, hapatic or cardiac dysfunction; hypertansion; thyroid disease; systemic adama; stomatitis and salivary gland enlargemant dua to the drug; polymyalgie rheumatica and temporal artaritis; patiants raceiving other potant chamotherapeutic agants, or long-tarm anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potant chemotherapy effect incidance of toxic reac-ions. Carefully instruct and observa the individual patiant, especially tha aging (forty years and over) who have increased suscaptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable banafits against potential risk of savara, van fatal, raactions. The disease condition itself is unaltered by tha drug. Usa with caution in first trimes-ter of pregnancy and in nursing mothers. Drug may appear in cord blood and braast milk. Sarious, aven fatal, blood dyscrasias, including aplastic anamia, may occur suddenly daspite regular hamograms, and may bacome manifast days or waeks attar cessation of drug. Any significant changa in total white count, relative decreasa in granulocytes, appaarenca of immatura torms, or tall in hamatocrit should signal immadiata cessation of therapy and complete hama-tologic investigation. Unexplained bleading involving CNS, adrenals, and G.I. tract has occurrad. The drug may potentiata action of insulin, sulfonyluree, and sulfonamide-type egents. Carafully observa patiants taking thasa agants. Nontoxic and toxic goitars and myxadema have bean raportad (tha drug reducas lodina uptake by tha thyroid). Blurrad vision can ba a significant toxic symptom worthy of a complata ophthalmological axamination. Swelling of anklas or faca in patiants undar sixty may be prevented by raducing dosaga. It adema occurs in patiants over sixty, discontinua drug.

Pracautions: Tha following should ba accomplishad at raguler intarvals: Caraful dotailed history for diseasa baing traatad and datactlon of aarliast signs of adversa raactions; complata physical examination including chack ot patient's waight; complata weakly (aspecially for tha aging) or an avary two waak blood chack; pertinant laboratory studies. Caution patiants about participating in activity raquiring alertness and coordination, es driving a car, atc. Casas of leukamia hava bean reported in patiants with a history of short- and long-tarm thorapy. Tha majority of these petients were ovar forty. Remembar that arthritic-typa pains can be the presenting symptom of leukemia.

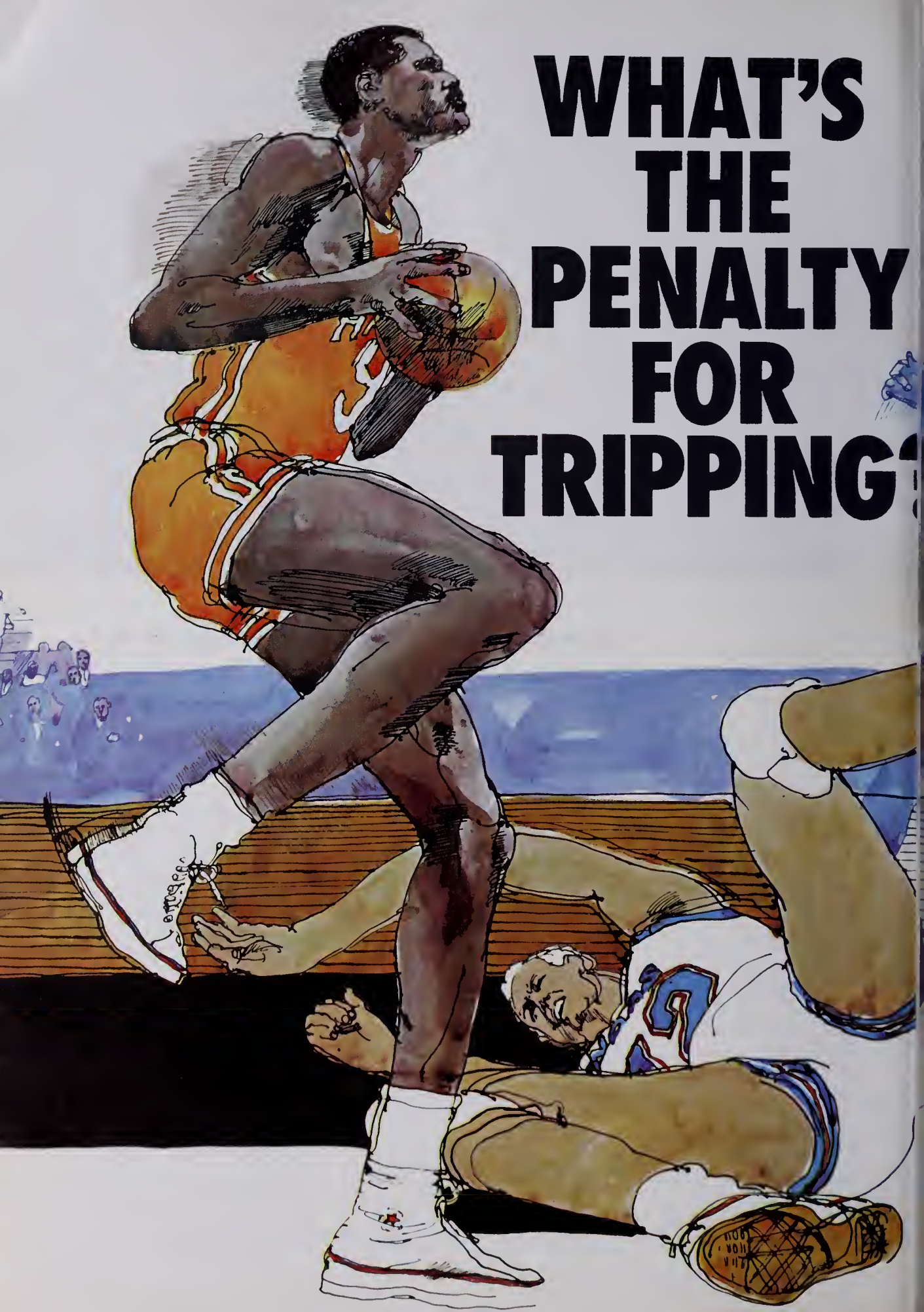
Adversa Reactions. This is a potent drug; its misuse can lead to serious results. Raview datailed informa-tion bofore beginning therapy. Ulcerativo esophagitis, acute and reactivated gastric and duodenal ulcer with portoration and hemorrhage, ulceration and per-toration of large bowal, occult G.I. bleeding with anamia, gastritis, epigastric pain, hamatamesis, dys-pepsta, nausea, vomiting and diarrhoa, abdominal distantion, agranulocytosis, aplastic anamia, hamo-lytic enamia, anamia dua to blood loss including occult G.I. bleading, thrombocytopania, pancytopenia, leukemia, laukopania, bona marrow depression, so-dium and chloride ratention, water retantion and edeme, plesma dilution, raspiratory alkalosis, matebolic acidosis, fatal and nonfetal hepatitis (choiestasis may or may not ba prominant), petechiaa, purpure without thrombocytopania, toxic pruritus, erythame nodosum, erythema multiforme, Stavens-Johnson syndroma, Lyell's syndroma (toxic nacrotizing apidermolysis), axfoliative dermatitis, serum sicknass, hypersansitivity angiitis (polyartaritis), anaphylactic shock, urticerie, arthralgia, fever, rashas (all allergic raactions raquire prompt and parmanant withdrawal of tha drug), pro-teinurie, hamaturie, oliguria, anuria, renal tailura with azotamie, glomarulonaphritis, acuta tubular necrosis, naphrotic syndrome, bilataral ranel cortical nacrosis, ranal stones, urateral obstruction with uric acid crys-tals due to uricosuric action of drug, impaired ranal function, cerdiac dacompansation, hypartension, paricerditis, diftusa interstitial myocarditis with mus-cla necrosis, parivascular granulomata, eggravation ot tamporal arteritis in petients with polymyalgia rheu-matica, optic nauritis, blurrad vision, retinal hamor-rhage, toxic amblyopia, ratinal datachmant, haaring loss, hyperglycomia, thyroid hyperplasia, toxic goitar association of hyperthyroidism and hypothyroidism (causal relationship not astablished), agitation, con-fusional states, lathargy; CNS raactions essociatod with ovardosage, including convulsions, euphoria, psychosis, depression, heedaches, hallucinations, giddinass, vertigo, coma, hypervontilation, insomnia; ulcerative stomatitis, salivary gland enlargement.

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For the skeletal muscle spasm of leg strains, Valium® (diazepam) can be a valuable adjunct. A dose of 2-10 mg, three or four times a day, goes to work to help break up the cycle of spasm/pain/spasm. The resultant relief of skeletal muscle spasm may permit greater mobilization of the affected muscles and may help the patient resume usual activities sooner than otherwise possible.



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Before prescribing, please consult complete product information, a summary of which follows:

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

***Indications:** Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

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DZ-106

President's Page



Archie E. Thomas, M. D.

I am deeply grateful for the privilege of serving you during the last year. I feel that it is the greatest honor that can come to a physician.

It seems as if it were only yesterday that Dr. Emfinger gave me the Gavel.

I have tried to the best of my ability to maintain the status quo and to keep the pressing problems constantly before you.

Our great edifice was built upon strong pillars, and as its present custodians, we must not let it be disfigured by whatever seems to be chipping away its foundation.

For a century and a quarter you and those who served before you have defended our profession's sacred traditions and have sponsored progressive movements to meet present and emerging needs; always keeping uppermost in mind the welfare of our patients to whom we long ago dedicated our professional talent and our life's work.

The hour of decision is near and I wish to thank you and my Maker for permitting me to be a member of the team.

Thank you all for your many courtesies, my last sincere request is to support your team and the new President, and in doing so you will be the victor.

Archie Thomas, M. D.

President

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Where We Are

We've reached the end of our fiscal year. We will pause to evaluate our position. It's important to report where we've been this year and what we have accomplished. It's equally important that we assess where we are going and our plans for getting there.

Personal evaluations are in order now also. Is your wife an Auxiliary member? Are you using your Auxiliary to it's potential?

Urge your wife to attend Auxiliary sessions while you attend your MASA meetings. The girls will be at the Whitley Hotel—just one block from the Jeff Davis, your convention hotel. Join your wife for the Auxiliary sponsored luncheon on Thursday, April 20 at 12:30. Mr. Winton Blount, former Postmaster General, will be our speaker.

I will give the report of Auxiliary activities. I'll promise to tell you more about the Auxiliary than you'd ever think to ask and you've no idea how much you want to know. We can count great gains for this fiscal year. We've done everything bigger and better. You can be assured of still greater happenings next year led by my successor Mrs. George Hansberry of Decatur.



Mrs. Gilder L. Wideman

Though this will be my last message to you published here, I cannot say 'goodbye.' I've been an active Auxiliary member too many years to stop now. Instead I will say this has been a great year for me. Don't forget me but call on me when I can help you.

Frances Wideman

President

Hobbies To Fill A Doctor's Leisure

No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard.

—Sir William Osler, 1909

'High As A Kite' And Cold As An Iceberg

Believe it or not, there are two Birmingham ophthalmologists who have been literally "high as a kite" in pursuit of a hobby that could be extremely hazardous. With water-skis fixed to their feet, towed by a speeding boat, each in turn has been suspended 15 to 30 feet above the water, clinging to a kite.

Only one of them, however, is the subject of this article. The other, Dr. Joseph Moore Dixon, 61, was one of six Jefferson doctors featured in February's Journal as M. D. members of a camera club. It was Dr. Dixon's camera that took both pictures shown here. And later on, Dr. Dixon will be the senior subject of another Journal feature, "Fathers and Sons in Medicine."

Although distance makes the man and the skis barely discernable, witnesses will testify that he is Elmar Maria-Josef Lawaczeck, born in Germany some 45 years ago, whose adventures in earlier life would make suspension from a flimsy kite seem innocent child's play by comparison.

The future Birmingham ophthalmologist was a young teenager when Hitler's recruiters snatched him from school, wrapped him in a uniform, and pushed him into combat. He was one of eight boys manning an anti-aircraft gun when the Americans captured them.



For a time he and his fellow prisoners congratulated themselves on being the prisoners of civilized Yankees. But luck turned sour when it was learned that this party was about to be turned over to the Russians, who protested the Americans were operating in a theater allotted to the Reds. It is quite possible that some understanding sentry looked the other way when young Lawaczeck escaped.

When the war ended and the "heat" was off, this now 18-year-old decided on medicine for a career, doubtless unaware of the harsh test to which his resolve would put him.

The "heat" was certainly off in classrooms too, where it was so bitterly cold that students kept on overcoat and gloves throughout the day. Lunch consisted almost entirely

(Continued on Page 771)

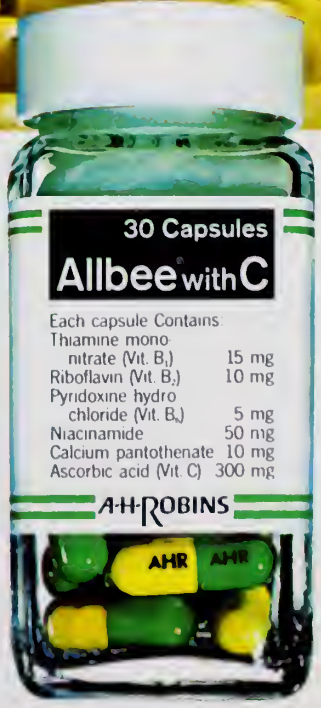


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hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital (warning: may be habit forming)	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.

Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or hypersensitivity to any of the ingredients.

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A·H·ROBINS

(Continued from Page 768)

of potato soup, and unfortunate were the late ones in line. For, as the supply shrunk, the chef simply added warm water to it!

And the greatest ambition of every medical student in the town of Tubingen, Germany, was to get a few days in the hospital to thaw out. For here there was heat.

Young L a w a c z e c k (the pronunciation sounds like **lav**-uh-chek) received his M. D. degree from Tubingen in 1954 and twelve years later was on his way to the land of the free and the home of the brave; and unsuspectingly to the romance of his life.

Over here, in a library, he met a German girl, visiting in the United States on a limited passport. It was love at first sight. They agreed they would go home to marry and asked for an extension of time for her passport. This was denied, respite the efforts of a number of influential Alabamians, including the then Senator Lister Hill. So they were married in a civil ceremony.

Subsequently, Dr. and Mrs. Lawaczeck recrossed the Atlantic to the home of the bride's parents in the Bavarian Alps. Her father, a retired civil engineer, gave the bride away in a church ceremony.

"Mrs. Dixon and I have visited in their delightful home in Bavaria," says his hobby associate and partner in practice.—W.J.M., Jr.

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PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

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Age 32; University of Texas, Southwestern, 1968; seeking institutional practice; Available January 1973. LW-3/3

Age 41; Temple University, 1963; National Board; Board eligible; seeking associate or group practice; Available December 1972. LW-3/4

Age 52; Marquette University, 1952; Board certified; seeking group, industrial, institutional or emergency room practice. LW-3/5

Internal Medicine—

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Age 31; University of Kentucky, 1966; seeking group practice; Board eligible; Available July 1972. LW-4/11

Age 31; Ohio State, 1965; Board certified; seeking group practice; Available July, 1972. LW-4/12

Age 29; National University of Mexico, 1966; seeking group or institutional practice; Available July 15, 1972. LW-4/13

Age 33; Cornell University, 1966; National Board; Board certified; seeking assistant or associate practice; Available January 4, 1972. LW-4/14

Obstetrics-Gynecology—

Age 49; Marquette University, 1945; Board certified; seeking institutional practice. LW-15/1

Age 57; Marquette University, 1943; Board certified; seeking industrial, institutional or clinical practice. LW-15/2

Ophthalmology—

Age 31; Chicago Medical School, 1966; National Board; seeking associate or group practice; Available July, 1973. LW-6/6

Age 32; State University of New York at Buffalo, 1966; National Board; seeking associate practice; Available July 1972. LW-6/7

Age 42; George Washington University, 1959; National Board; Board certified; seeking group or institutional practice; Available 1972. LW-6/8

Orthopedic Surgery—

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Age 31, Temple University, 1965; National Board; seeking group or associate practice. Available July 1972. LW-14/2

University of Illinois, 1965; National Board; seeking group or associate practice. Available July 1, 1972. LW-14/3

Age 31; University of Alabama, 1966; National Board; Available July, 1973. LW-14/4

Otolaryngology—

Age 32; Temple University, 1965; National Board; Board eligible; seeking solo or group practice; Available August 1972. LW-16/1

Age 32; Tulane University Medical School, 1965; Board certified; seeking solo, associate, or group practice; Available September 1, 1972. LW-16/2

Pathology—

Age 33; University of Texas, 1965; National Board; Board certified; seeking group or associate practice; Available September 1, 1972. LW-8/7

Age 32; Duke University, 1965; Board certified; seeking group practice; Available June, 1972. LW-8/9

Radiology—

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 31; Medical College of Georgia, 1966; National Board; Board certified; seeking group practice; Available August 1, 1972. LW-10/6

Age 31; University of Iowa, 1966; seeking assistant or associate practice; Available October 1, 1972. LW-10/8

Age 32; Louisiana State, 1966; Available September 1, 1972. LW-10/9

Surgery—

Age 33; University of Maryland, 1965; seeking solo, group, or associate practice; Available July 1973. LW-11/7

Age 33; University of Tennessee, 1967; seeking practice in General Surgery. Available July 1972. LW-11/8

Age 48; Duke University, 1947; National Board; Board certified; seeking group practice in general surgery; Available July 1, 1972. LW-11/9

Age 39; Creighton University School of Medicine, 1957; National Board; Board certified; seeking associate or group practice; Available June, 1972. LW-11/10

Age 34; New York University School of Medicine, 1964; National Board; Board certified; seeking solo, associate, group or institutional practice; Available July 1, 1972. LW-11/12

Age 32; Medical College of Virginia, 1965; Board eligible; seeking associate or group practice; Available August, 1972. LW-11/13

Urology—

Age 34; Medical College of Georgia, 1967; seeking group or associate practice; Available July 1972. LW-12/1

Age 31; Northwestern University, 1965; seeking associate or group practice; Available July 1, 1972. LW-12/3

Age 36; Louisiana State University Medical School, 1961; Board eligible; seeking associate practice; Available December, 1972. LW-12/4

Physicians Wanted

Special Openings—

Wanted, qualified physicians in either OB-GYN, Internal Medicine, or Thoracic Vascular Surgery, to practice with group clinic. The clinic is a 16 man multi-specialty group, and is located in a city of 35,000 with a trade area of 160,000. Excellent recreational facilities and educational opportunities in the area. PW-14

Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

Wanted, internists, generalists, radiologist, orthopedist, general surgeons, town of 15,000 population in county of 45,000 population in southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-17

Wanted: Immediately. Pediatrician to replace recently deceased partner in northeast Alabama. Enter busy practice in a predominantly GP area. Enjoy rural, quiet living with nearby scenic and recreational facilities. Salary, practice, everything negotiable. PW-19

Physician wanted. Student Health Service, University of Alabama. Eight full-time physicians. New facility. Competitive salary. Liberal vacation. Excellent fringe benefits. PW-20

Wanted: General Practitioner or Internist to join active 4-M. D. professional association—3-GP's, 1 Board Surgeon. Modern offices, accredited 75 bed hospital. Beautiful town of 10,000 with excellent churches, schools (public and private). Salary for 3-6 months then arrangement for full partnership. PW-22

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27

(Continued Next Page)

PLACEMENT SERVICE

For community of 1,500 population located in south Alabama near city of 12,000 population. Hospitals located within 25 miles. Office space and equipment available. Farming, cattle and textile industries in the area. Several churches and school. Civic clubs and golf courses. PW-1-1

Opportunity for two general practioners to assist two established GP's in a progressive comprehensive medical program in rural county of 12,500 population. Modern new office building, fully equipped, located in county seat, 20 miles west of Montgomery, Alabama. Excellent salary. Several churches, school, and recreation areas. PW-1/8

Opportunity in town of 3,000 population located in trade area of 12,000 population in south Alabama. 23-bed hospital. Office space available. Numerous churches and schools. Recreational areas nearby. PW-1/11

Opportunity for associate in general practice or take over general practice in town of 1,200 population in south central Alabama with trade area of 5,000 population. Well established practice and well equipped office. Located near recreational area. PW-1/12

Opportunity in town of 3,000 population in trade area of 15,000 located in West Alabama. Clinic building available with equipment. Farming and several small industries. Several schools and churches. PW-1/13

Tips to . . .

Prevent Malpractice Claims

GUARANTEE:

Never promise or guarantee a cure as a result of any special operation, medication or course of treatment.

DIAGNOSIS:

A patient's complaints and history are often valuable diagnostic aids and should not be overlooked or ignored.

INSTRUMENTS:

Use only sterile instruments in any operation.

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Fathers and Sons in Medicine

The Doctors Grimes Share A Practice And A Hobby

"Few sons are like their father," complained Homer, the blind poet in his Odyssey, which he wrote more than eight centuries before Christ, adding bitterly, "most are worse, few better."

Few people in his day . . . or ours . . . like to have their mistakes underscored, so he might be made very unhappy if he returned to earth in our time and saw how many sons are following their physician fathers into medicine.

All else being equal (which it couldn't possibly be!) sons in medicine who keep pace with the advances in medicine should always be a step ahead of the fathers. Which flatly contradicts the latter part of Homer's statement.

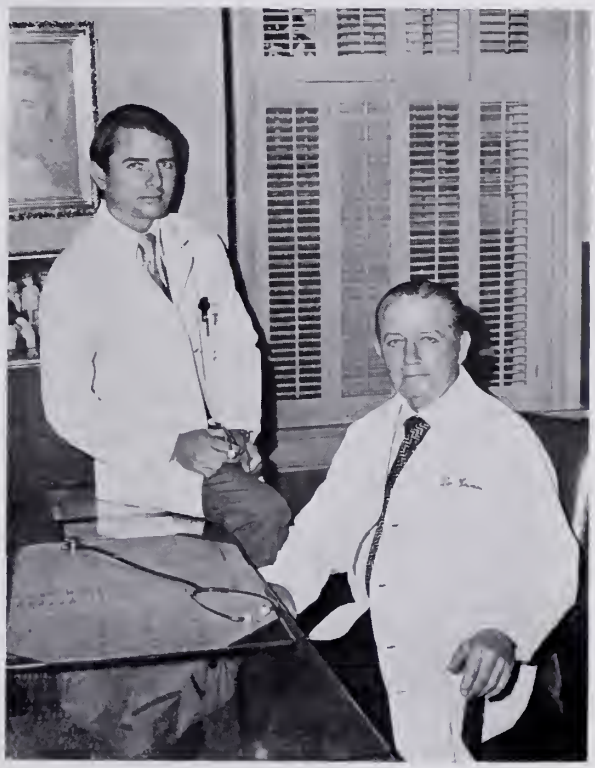
But invidious comparisons have no place in articles about sons who pay their the highest compliment of which they are capable by following them into medicine.

This particular article is about a son who not only followed his father into medicine, but into the specialty his father had chosen, who teamed with his father in the practice of obstetrics, and then chose the hobby his father had long since chosen.

But in a participating sport like golf, differences in age have a telling effect, and it is not the father but the son who is the Gadsden Country Club's golf champion!

Ormond Ralph Grimes was born on Sunday, 19 October 1902. With his baccalaureate from Birmingham-Southern College, he went to Emory for his M. D. (received in 1930), interned in Birmingham at Lloyd Noland, and in his forty years of practice has delivered more than 8,000 babies "alive and kicking."

Dr. Grimes serves on the Board of Directors of Gadsden's American National Bank and is a past president of the Gadsden Kiwanis Club, a past president of the Etowah County Medical Society, and a past president of the Quarterback Club. He has served as chairman of the Board of Stewards and president of the Trustees of the First Methodist Church. And he is presently serving as vice president of the medical staff of the Baptist Memorial Hospital.



DRS. GRIMES, JUNIOR AND SENIOR

To the marriage of Dr. O. R. Grimes and the former Allie Sue Stallings of Gadsden have been born two sons:—Ormond, Jr., an Orthodontist in Atlanta, and Larry.

Larry Dewey Grimes was born on Tuesday, 22 December 1936. He reversed the order of his father's higher education by going to At-

(Continued on Page 778)

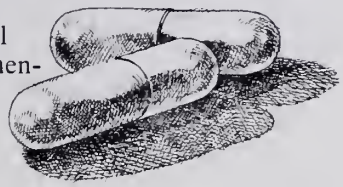
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Helps reduce anxiety-related G.I. symptoms

A patient may blame his attacks of gastritis or duodenitis on "something he ate" but contributing factors may be his job, marital problems, financial worries or some other unmentioned source of stress and excessive anxiety that exacerbated the condition. Whether it is "something he ate" or "something eating him," adjunctive Librax can help. Librax offers both the antianxiety action of Librium® (chlordiazepoxide HCl), that can help relieve excessive anxiety, and the dependable anticholinergic action of Quarzan® (clidinium Br), that can help reduce gastrointestinal hypermotility and hypersecretion.



Patient-oriented dosage – up to 8 capsules daily in divided doses

For optimal response, dosage can be adjusted to suit patient needs—1 or 2 capsules, 3 or 4 times a day.

To help relieve anxiety-linked symptoms in gastritis and duodenitis

adjunctive Librax®

ROCHE

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

ROCHE

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(Continued from Page 775)

lanta, to Emory for his baccalaureate degree, and returning to Birmingham, to the University of Alabama for his M. D. At Emory he was president of his SAE fraternity chapter.

The younger Dr. Grimes interned at St. Vincent's Hospital in Birmingham, after which he was stationed at Fort Campbell, Kentucky, for two years in the Army's on-the-job-training program in OB-GYN, thereafter returning to Birmingham for his specialty training, where he is now a Diplomate of the Ameican College of Gynecology.

Dr. Larry Grimes is married to the former Mary Kathryn Killebrew of Chattanooga, Tennessee, and they have two children:—Larry Dewey, Jr., a 9-year-old known to everyone as "Dee", and a lovely 3-year-old daughter, Lauren.

Since July of 1969, this father-and-son in medicine have practiced together in their own suite of offices, the senior member of the team in obstetrics and general practice, the junior in obstetrics and gynecology.

Though neither volunteered it or admitted it, they are doubtless very unequal on the tees, the fairways and greens of the Gadsden Country Club. Else, Dr. Grimes the Younger would be sharing championship honors with Dr. Grimes the Elder.

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Current G.U. Research

Gantanol® in animals (sulfamethoxazole)



Control



12.5 mg sulfamethoxazole/kg of body weight



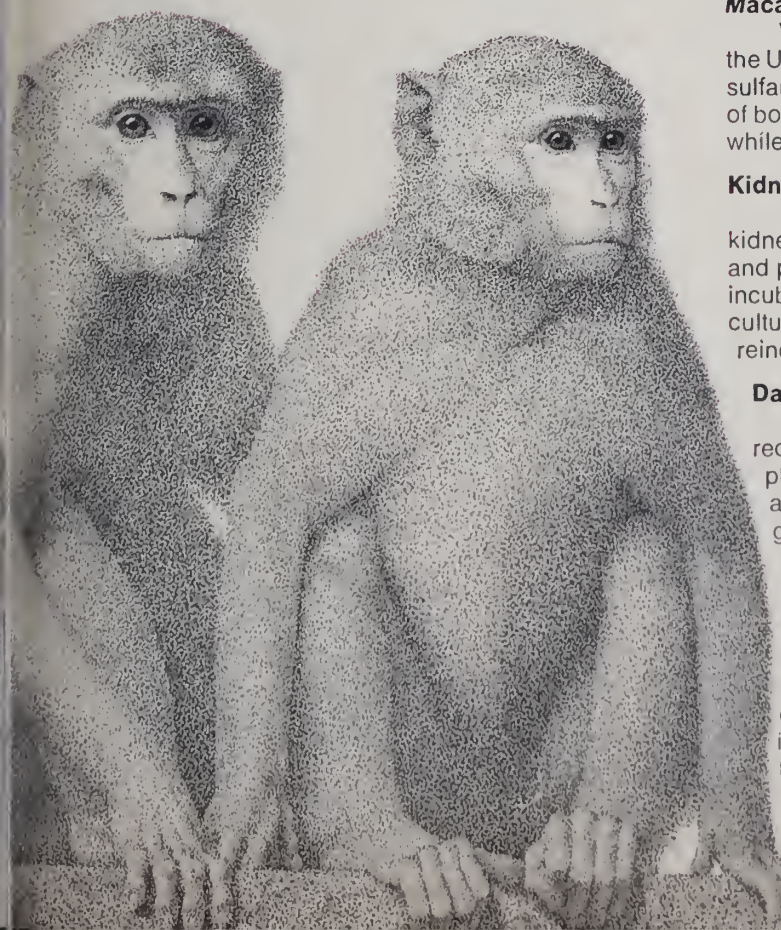
50 mg of sulfamethoxazole/kg of body weight



100 mg of sulfamethoxazole/kg of body weight

Tissue slice technique maps renal distribution in animal studies

Please note that while the method described may add to the knowledge of how antibacterial agents are distributed in the kidney of this animal, no conclusions can be drawn from this study relative to the drug's distribution, effect or use in humans, as it is not possible to extrapolate animal data to humans.



Gantanol® (sulfamethoxazole) administered to *Macaca speciosa* monkeys

Working with *Macaca speciosa* monkeys, researchers at the University of Arkansas Medical Center administered sulfamethoxazole at doses of 12.5 mg, 50 mg and 100 mg/kg of body weight. Each dosage level was given to three animals while three were left untreated as controls.*

Kidneys inoculated with *Staphylococcus aureus*

After 2½ hours, the 12 monkeys were sacrificed and their kidneys frozen with CO_2. Sagittal tissue slices were prepared and placed on blood agar bacteriological plates. They were incubated at 37°C. for 1½ hours. *Staphylococcus aureus* broth culture was then used to inoculate the tissue and slices were reincubated.*

Dark staining reveals heavy bacterial growth

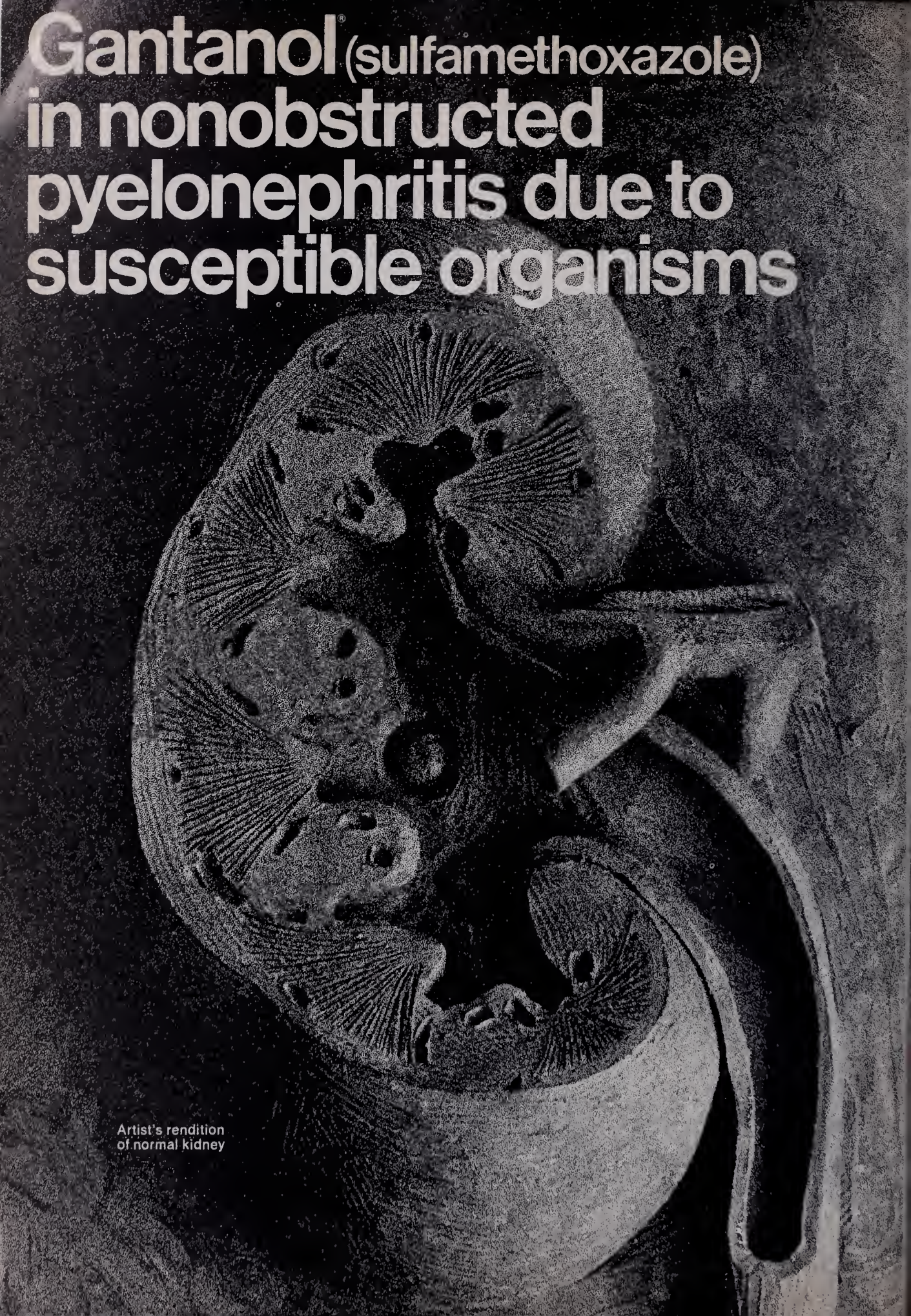
A solution of triphenyltetrazolium chloride, which turns a reddish purple in the presence of bacteria, was added to the plates after 6 hours. Renal slices from the untreated control animals consistently demonstrated heavy bacterial growth, as evidenced by dark staining.*

Distribution throughout *Macaca speciosa* renal parenchyma

At the dosage of 12.5 mg/kg of body weight, a diffuse stain pattern indicated partial inhibition of bacterial growth. Renal slices from monkeys given the 50 and 100 mg/kg doses showed no staining, indicating complete bacterial inhibition and *suggesting* antibacterial distribution throughout the parenchyma.*

*Mobley, J. E ; Redman, J. F , and Robbins, R P : *Surg. Gynec. Obstet.*, *131* 1122, 1970.

Gantanol® (sulfamethoxazole) in nonobstructed pyelonephritis due to susceptible organisms



Artist's rendition of normal kidney

Establishes antibacterial levels in blood and urine in from 2 to 3 hours

In from 2 to 3 hours of the initial 2-Gm adult dose, effective antibacterial levels of Gantanol® (sulfamethoxazole) are achieved in both blood and urine. This prompt, early treatment in acute nonobstructed pyelonephritis may help avert possible chronic sequelae.

Controls primary bacterial offenders

Antibacterial Gantanol (sulfamethoxazole) controls susceptible *E. coli,* the most common cause of urinary tract infections. It is also effective against other susceptible gram-negative and gram-positive urinary pathogens such as *Klebsiella-Aerobacter, Staph. aureus* and *Proteus mirabilis.*

Also effective in nonobstructed chronic and recurrent urinary tract infections

It is also common for the elderly and debilitated to develop chronic nonobstructed urinary tract infections, primarily pyelonephritis and cystitis. Such cases often respond satisfactorily to therapy with Gantanol.

B.I.D./T.I.D. schedule gives round-the-clock coverage

Subsequent 1-Gm doses can provide up to 12 hours of antibacterial activity. The *b.i.d.* dosage is recommended for mild to moderate infections; the *t.i.d.* for the more severe u.t.i. Gantanol provides coverage around the clock—coverage that is especially important during the hours of sleep, when urinary retention favors bacterial proliferation.

Your option: tablets or suspension

Gantanol is available in two convenient dosage forms—tablets or a pleasant-tasting suspension. It is generally well tolerated with relative freedom from complications. The usual precautions with sulfonamide therapy should be observed, including adequate fluid intake, frequent c.b.c.'s and urinalyses with microscopic examination. The most common side effects reported are nausea, vomiting and diarrhea. (It should also be noted that the increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent u.t.i.)

in nonobstructed pyelonephritis due to susceptible organisms

Gantanol®
(sulfamethoxazole)

Basic therapy

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies.

***Note:* Since *in vitro* sulfonamide sensitivity tests are not always reliable, carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent urinary tract infections.**

Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.*, rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows: *Adults*—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) *b.i.d.* or *t.i.d.* depending on severity of Infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs (½ tab or teasp.) *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful

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Vital Statistics

NEW MEMBERS

Mobile County

Beard, Jeff Hixon, b 35, mc U. Alabama '60, sb 61, 1720 Center Street, Mobile, Alabama 36604. U.

Bridges, William Randolph, b 37, mc Tulane U. '63, recip. La. '71, 1653 Springhill Avenue, Mobile, Alabama 36604. NS.

Buzhardt, Horace Emerson, b 37, mc U. Mississippi '64, recip. Miss. '67, 1701 Springhill Avenue, Mobile, Alabama 36604. ObG.

Dulaney, Frank McGee, Jr., b 24, mc U. Arkansas '54, recip. Arkansas '71, 1564 Center Street, Mobile, Alabama 36604. Anes.

Faulkner, Henry Wade, b 41, mc U. Alabama '65, sb 66, 1359 Springhill Avenue, Mobile, Alabama 36604. Oph.

Lofton, Joseph Edgar, b 24, mc U. Alabama '47, sb 48, 2451 Fillingim Street, Mobile, Alabama 36617.

Miller, Daniel Prescott, b 38, mc Louisiana State U. '63, recip. La. '71, P. O. Box 7544, Mobile, Alabama 36607. R.

Wilson, Louie Cecil, b 37, mc Tulane U. '63, recip. La. '68, 1729 Springhill Avenue, Mobile, Alabama 36604. C-ThS.

Montgomery County

Williams, James Robert, b 39, mc U. Tennessee '64, recip. Tenn. '70, 1235 Forest Avenue, Montgomery, Alabama 36106. Anes.

Morgan County

Conover, John Roy, b 21, mc U. Pittsburgh '52, recip. Pennsylvania '70, 407-4th Avenue, S. E., Decatur, Alabama 35601. GP.

Sewell, John Banks, Jr., b 38, mc U. Vanderbilt '63, recip. NBME 71, P. O. Box 1415, Decatur, Alabama 35601. R.

MEMBERS DECEASED

Calhoun County

Woodruff, Gerald Ginness, Sr., Anniston, Alabama, Deceased 2/2/72.

Lauderdale County

Jeter, James Neal, Florence, Alabama, Deceased 1/18/72.

Lee County

Bruce, Byron Sanford, Opelika, Alabama, Deceased.

Mobile County

Dodson, James Horace, Mobile, Alabama, Deceased 2/4/72.

Johnson, Frank Wendell, Mobile, Alabama, Deceased 11/24/71.

CHANGES OF ADDRESS

Baldwin County

Van Wezel, Norman, present Foley to River Route, Magnolia Springs, Alabama 36555.

Butler County

Davis, William E., present Greenville to 300 College Street, Greenville, Alabama 36037.

Stabler, Aubrey A., present Greenville to 300 College Street, Greenville, Alabama 36037.

Stabler, E. Vernon, Sr., present Greenville to 300 College Street, Greenville, Alabama 36037.

Stabler, E. Vernon, Jr., present Greenville to 300 College Street, Greenville, Alabama 36037.

Stabler, Paul A., present Greenville to 300 College Street, Greenville, Alabama 36037.

Coffee County

Ferlisi, Joseph A., present Enterprise to Douglas Brown Drive, Enterprise, Alabama 36330.

Grimes, James T., present Enterprise to Douglas Brown Drive, Enterprise, Alabama 36330.

Lumpkin, Thomas R., present Enterprise to Douglas Brown Drive, Enterprise, Alabama 36330.

O'Neal, J. Paul, present Enterprise to Douglass Brown Drive, Enterprise, Alabama 36330.

Paulk, James F., present Enterprise to Douglass Brown Drive, Enterprise, Alabama 36330.

Sanders, Horace E., present Enterprise to Douglass Brown Drive, Enterprise, Alabama 36330.

Stanley, James F., present Enterprise to Douglass Brown Drive, Enterprise, Alabama 36330.

Colbert County

Braund, Ralph R., Jr., present Sheffield to P. O. Box 459, Sheffield, Alabama 35660.

Mitchell, James A., present Sheffield to 207 East 4th Street, Sheffield, Alabama 35660.

Covington County

Johnson, J. Wayne, present Andalusia to 601 By-Pass West, P. O. Drawer 370, Andalusia, Alabama 36420.

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Fayette County

Breitling, Harold E., Jr., present Fayette to McNease Clinic, P. O. Box 429, Fayette, Alabama 35555.

Hodo, Henry G., Jr., present Fayette to McNease Clinic, P. O. Box 429, Fayette, Alabama 35555.

Robertson, John B., present Fayette to West Columbus Street, Fayette, Alabama 35555.

Rutland, Richard O., Jr., present Fayette to McNease Clinic, P. O. Box 429, Fayette, Alabama 35555.

Franklin County

Hyatt, Wayne P., present Russellville to 206 Coffee Avenue, N. E., Russellville, Alabama 35653.

Terry, Aubrey E., present Russellville to 206 Coffee Avenue, N. E., Russellville, Alabama 35653.

Wilson, William E., present Russellville to 206 Coffee Avenue, N. E., Russellville, Alabama 35653.

Houston Conuty

Hanson, William B., present Dothan to 1625 East Main Street, Dothan, Alabama 36301.

Sanders, Cecil M., present Dothan to 1625 East Main Street, Dothan, Alabama 36301.

Jackson County

Letson, Louis E., Jr., present Scottsboro to 309 Parks Avenue, Scottsboro, Alabama 35768.

Jefferson County

Arnold, Sidney W., present Birmingham to 3797 Woodland Drive, Memphis, Tennessee 38111.

Baugh, Aubrey T., Jr., present Birmingham to 3349 Montgomery Highway, Birmingham, Alabama 35209.

Bradley, Merrill N., present Birmingham to 1717-11th Avenue South, Birmingham, Alabama 35205.

Freeman, Arthur M., Jr., present Birmingham to 1717-11th Avenue South, Birmingham, Alabama 35205.

Patton, Thomas B., present Birmingham to 1717-11th Avenue South, Birmingham, Alabama 35205.

Ricketts, George L., Jr., present Birmingham to 1717-11th Avenue South, Birmingham, Alabama 35205.

Lauderdale County

Shuttleworth, John G., present Florence to P. O. Box 126, 102 South Pine Street, Florence, Alabama 35630.

Marshall County

Tucker, Alex L., present Albertville to 908 Grove Street, Chapel Hill, North Carolina 27514.

Mobile County

Baston, William P., present Mobile to 201 Cox Street, Mobile, Alabama 36604.

Davis, Milas E., Jr., present Mobile to 2451 Fillingim Street, Mobile, Alabama 36617.

Davis, Thomas D., present Mobile to 241 Cox Street, Mobile, Alabama 36604.

Giordano, John M., Jr., present Mobile to 3703 St. Stephens Road, Whistler, Alabama 36612.

Lammons, George L., present Mobile to 4682 Airport Boulevard, Mobile, Alabama 36608.

Lingo, John K., present Mobile to 1359 Springhill Avenue, Mobile, Alabama 36604.

Maxwell, J. Watson, present Mobile to P. O. Box 7544, Mobile, Alabama 36607.

Murdock, Church E., Jr., present Mobile to 1710 Center Street, Mobile, Alabama 36604.

Murphy, Samuel S., Jr., present Mobile to 118 North Royal Street, Mobile, Alabama 36602.

Peake, John D., present Mobile to P. O. Box 7544, Mobile, Alabama 36607.

Reed, Robert A., present Mobile to 2451 Fillingim Street, Mobile, Alabama 36617.

Robinson, Judkin M., present Mobile to 1800 Stone Street, Mobile, Alabama 36617.

Rutherford, Charles L., Sr., present Mobile to 1263 Selma, Mobile, Alabama 36604.

Taylor, J. Leslie, present Mobile to 118 North Royal Street, Mobile, Alabama 36602.

Taylor, Thomas H., present Mobile to 118 North Royal Street, Mobile, Alabama 36602.

Wallace, Gerald L., present Satsuma to 5237 Hartley Road, Satsuma, Alabama 36572.

Welter, James C., present Mobile to 2451 Fillingim Street, Mobile, Alabama 36617.

Willson, James K. V., present Mobile to P. O. Box 7544, Mobile, Alabama 26607.

Montgomery County

Brown, Richard E., present Montgomery to 2020 Normandie Drive, Montgomery, Alabama 36111.

Burton, Otto L., present Montgomery to 420 Buttonwood Lane, Largo, Florida 33540.

Cocks, George R., present Montgomery to 1722 Pine Street, Montgomery, Alabama 36106.

Hester, Keith, present Montgomery to 750 Washington Avenue, Montgomery, Alabama 36104.

Young, Frank C., Jr., present Montgomery to 2020 Normandie Drive, Montgomery, Alabama 36111.

Tallapoosa County

Brasfield, Milton S., III, present Alexander City to P. O. Box 255, Medical Arts Building, Suite 2, Alexander City, Alabama 35010.

Temple, James P., present Alexander City to Temple Medical Building, P. O. Box 268, Alexander City, Alabama 35010.

Tuscaloosa County

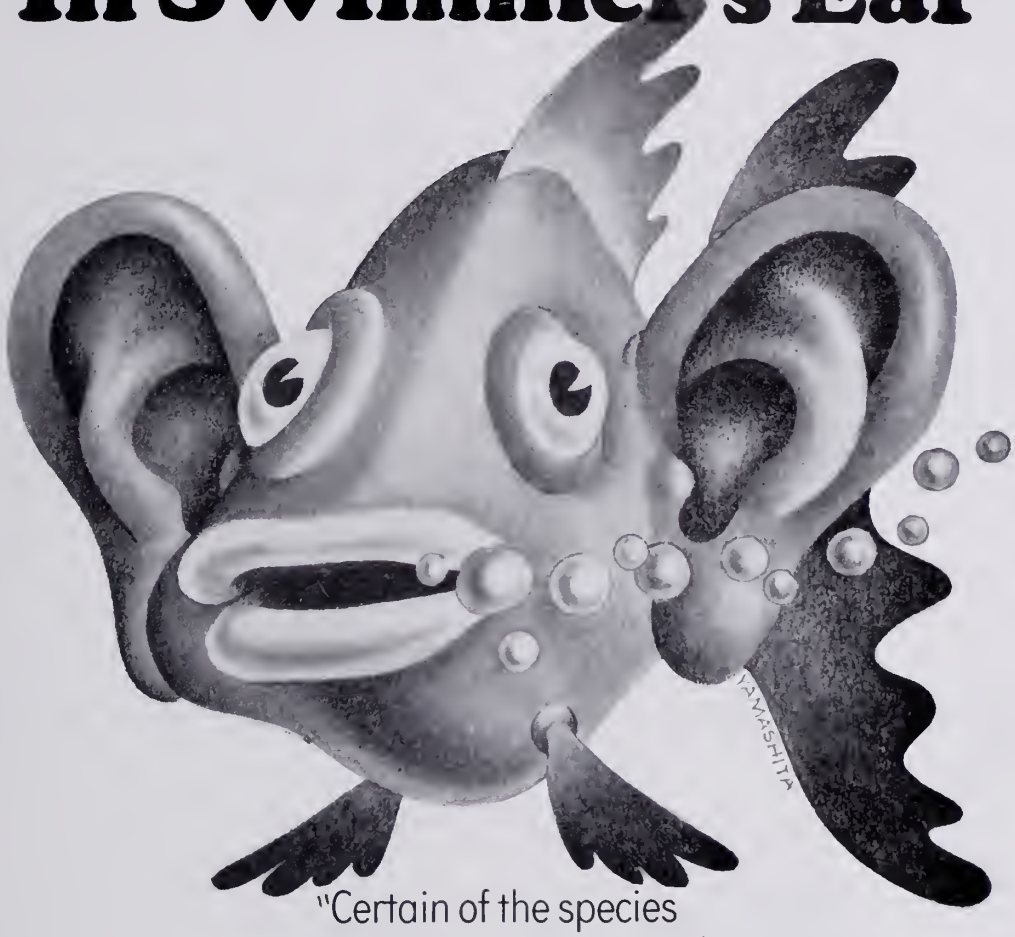
Santina, Henry D., present Tuscaloosa to 21 Beech Hills, Tuscaloosa, Alabama 35401.

NEW TELEPHONE NUMBERS

Baker, G. L., Madison	536-0027
Beard, J. H., Mobile	433-6595
Bradley, M. N., Jefferson	933-7301
Bridges, W. R., Mobile	433-1605
Brown, R. E., Montgomery	281-4820
Buzhardt, H. E., Mobile	438-2576
Chason, O. L., Mobile	928-2936
Chenault, S. B., Morgan	353-3464
Cocks, G. R., Montgomery	265-3591
Conover, J. R., Morgan	353-1251
Daves, J. G., Cullman	734-1550
Dulaney, F. M., Jr., Mobile	344-3494
Faulkner, H. W., Mobile	432-2731
Freeman, A. M., Jr., Jefferson	933-2787
Hanford, J. R., Marion	921-2175
Kesmodel, K. F., Jr., Jefferson	933-8330
Luketic, G. C., Jefferson	785-1101
Martinec, L. W., Madison	536-0027
Morgan, Cecil, Jr., Jefferson	328-9387
Neville, G. M., Jr., Choctaw	459-2836
Patton, T. B., Jefferson	933-7301
Rosen, H. L., Montgomery	262-5179
Sewell, J. B., Jr., Morgan	355-7133
Sherer, R. J., Jefferson	933-7821
Stabler, A. A., Butler	382-2681
Stabler, E. V., Sr., Butler	382-2681
Stigler, S. L., Jefferson	933-8028
Temple, J. P., Tallapoosa	234-4295
Trammell, D. E., Morgan	350-0566

(Continued on Page 788)

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natatory pursuits."

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Formula: Contains (w/w) 0.2% FURACIN, brand of nitrofurazone, 0.375% Micofur®, brand of nifuroxime, and 2% diperodon hydrochloride dissolved in water-soluble, nondrying, hygroscopic polyethylene glycol.

Indications: For treatment of bacterial otitis externa, bacterial otitis media and otomycosis. In otitis media, this preparation is not effective if the tympanic membrane is intact.

FURACIN (nitrofurazone) and Micofur (nifuroxime) are active against a variety of gram-positive and gram-negative organisms. Activity versus Pseudomonas sp. is limited to certain strains. Micofur (nifuroxime) is active against Candida (Monilia) albicans.

Precautions: Sensitization may occur with prolonged use and is more likely to develop in eczematous otitis externa. To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.

This preparation is not indicated for use in treatment of cholesteatoma, where surgical intervention is necessary.

Supplied: Bottle of 15 cc. with dropper

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EATON LABORATORIES
Division of The Norwich Pharmacal Company
NORWICH, NEW YORK 13815

(Continued from Page 786)

Van Wezel, Norman, Baldwin 965-2522

Williams, J. R., Montgomery 264-5311

Wilson, L. C., Mobile 433-0404

Woods, T. B., Jr., Houston 794-2840

Young, F. C., Jr., Montgomery 281-4820

CHANGE OF SPECIALTY

Etowah County

Azar, David A., 1011 Forrest Avenue, P. O. Drawer 520, Gadsden, Alabama 35902. R.

Azar, Kathryne N., 1011 Forrest Avenue, P. O. Drawer 520, Gadsden, Alabama 35902. P.

Jackson County

Letson, Louis E., Jr., 309 Parks Avenue, Scottsboro, Alabama 35768. GP-S.

MEMBERS TRANSFERRED

Franklin County

Carrier, Marshall H., Jr., 101 East Montgomery Street, Russellville, Alabama 35653, from member Morgan County Medical Society to member of Franklin County Medical Society. S-Or.

Mobile County

White, Robert L., 1720 Springhill Avenue, Mobile, Alabama 36604, from member Jefferson County Medical Society to member of Mobile County Medical Society. N.



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AMA Policy

The American Medical Association has recently published a compilation of policy positions relating to the practice of medicine. The Journal will publish these policies each month as space permits.

It is suggested that physicians clip and file them for future reference.

Medicare Fees

The House vigorously opposes the legislation pending before Congress which would "single out the medical profession to establish arbitrary fee limitations." (Dec. 1970)

The AMA reaffirms that reimbursement for physicians' services under private or government financing programs be on the basis of "usual, customary, or reasonable fees." A committee of the physician's peers may appropriately review and pass upon the equity and justice of his charge, but this shall not be determined by any other person, organization or agency. (Dec. 1970)

The physician should adhere to his usual, customary, and reasonable charges. He must report his services fully and specifically in his billing, and he should guide the patient in his application for reimbursement. The physician should discuss his fee with the patient in advance, explaining that Medicare is not a full-paid plan. If his usual fee exceeds those which are customary in the area, the physician should explain in advance the effect this will have on Medicare payments. Local medical societies should make review mechanisms freely available to insure that the interests of patients are protected in dealing with Medicare carriers and to advise all parties as to the propriety of fees charged by physicians. (Nov. 1967)

Multiphasic Screening

This is a promising technique which requires further refinement and evaluation to identify its benefits, limitations and potential. All such screening programs should meet the criteria of (a) reliability; (b) validity; (c) yield of information; (d) cost; and (e) acceptance by physician, laymen and the community. (June 1968)

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Optometry

The AMA urges Congress to exclude the services of optometrists (except as now provided) as "physicians" from all federally-assisted health care programs. (Dec. 1970)

Optometry is an occupation that deals with optics and with the bending and refracting of light waves. It is not concerned with the treatment of the eye. Constituent state medical associations are urged to oppose as detrimental to the public interest any legislation that would authorize optometrists to engage in the diagnosis or treatment of disease or injury of the eye. (June 1966)

Organ Transplants

(1) The staff of a hospital planning to initiate a program of heart transplantation should have, in addition to the necessary surgical skill: (A) adequate background in animal research; (B) experience in immunosuppressive therapy; (C) a protocol of clinical research adequate to follow and evaluate the patient's course. (2) Cardiac transplantation must be regarded as an investigative procedure until long-term evaluation is possible. Its use should be restricted to patients for whom there is no other means of therapy offering a life-sustaining prognosis. The procedure does not warrant extension to patients in whom it might be regarded as palliative or preventive rather than life saving. (3) The right of the potential donor to the best possible medical care must remain sacred. The fact of death must be irreversible and must be demonstrated by adequate current and acceptable scientific evidence. The determination of death in organ donors must be made by no less than two physicians not associated with the surgical team performing the transplant. (4) Research must continue into methods of organ storage, development of artificial hearts and cardiac assistance devices, surgical repair of the diseased heart, the use of xenografts, and the basic causes of heart disease and hypertensive vascular disease. (Dec. 1968)

Osteopathy

The Association admits qualified Doctors of Osteopathy to full active membership in the AMA. (July 1969)

The AMA urges medical schools, the State Boards of Medical Examiners, and the AAMC to explore the possibility of developing reasonable curricula on the postgraduate level for awarding an M. D. degree to qualified osteopaths. (July 1969)

The primary issue today between medicine and osteopathy is the level of education and practice. The AMA suggests (1) each school of osteopathy strengthen its faculty and improve its facilities; (2) the agencies which accredit the schools of osteopathy consult with the AMA in an effort to meet the standards required for accredited schools of medicine; (3) accredited hospitals may accept qualified osteopaths for appointment to the medical staff; (4) county and state medical societies may accept qualified osteopaths as active members; (5) each of the speciality boards may accept for examination for certification those osteopaths who have completed AMA-approved internships and residency programs and have met the other regular requirements for all Board candidates; (6) AMA-approved internships and residency programs may be opened to qualified graduates of schools of osteopathy. (Dec. 1968)

Participation In Government Medical Programs

Voluntary health agencies must maintain their autonomy when they participate in programs undertaken with governmental support or funded by government. Voluntary agencies must continue their major role as underwriters of research by investigators interested in innovative approaches, and assume responsibility for evaluating government programs in health care. (Dec. 1970)

With government increasingly involved in research and experiment in the delivery of and payment for health care, government programs cannot be ignored. On the other hand, the multiplicity of programs and approaches at national, state and local levels precludes blanket endorsement of any given level of involvement. Medical societies **may,** after mature consideration, legitimately take part in such programs as appear appropriate and meet established standards of acceptability. (June 1968)

The society should use some mechanism such as a nonprofit corporation or other entity separate from the society itself and served by an independent administrative

(Continued on Page 793)

Nothing new about Synirin other than ... it's a stable, uncoated, fast disintegrating tablet of aspirin with pentobarbital potentiating the aspirin analgesia.

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ASPIRIN 5 GR.—PENTOBARBITAL 1/8 GR.

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PRESCRIBING INFORMATION: To relieve tension headaches and arthritic pains, 2 tablets q 4 h. Aspirin and pentobarbital begin their action promptly, continuing for about 4 hours. The small pentobarbital content gives no perceptible sedation. Pentobarbital is destroyed by the body and there is no accumulation. Synirin will supply any aspirin therapy with equal safety. Use aspirin with caution in peptic ulcer.

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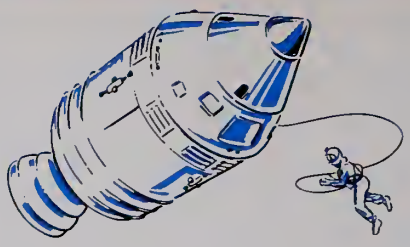
Aspirin ..... 325 mg. (5 gr.)
Pentobarbital* ..... 8 mg. (1/8 gr.)
*May be habit forming.

Federal law prohibits dispensing without prescription

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Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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(Continued from Page 790)
staff where possible, to avoid direct operational involvement. (June 1968)

Peer Review

The Association reaffirms its support of Peer Review Organization and urges that "all components of organized medicine give energetic support to furthering the effective implementation of peer review." (Dec. 1970)

The AMA supports existing mechanisms such as public grievance and adjudication committees and utilization and peer review committees as most appropriate and effective for the consideration of fees and the costs of medical care. (June 1970)

Pollution Control And Environmental Health

The AMA urges the health and education profession to establish ecology and pollution control educational programs in the nation's schools, colleges, and communities. (Dec. 1970)

The AMA is opposed to federal and State programs to control fire ants or other insect pests in the Southeastern states by using Mirex or similar potentially cumulative carcinogenic pesticides, without consideration of the ecological consequences or the effects on public health. (Dec. 1970)

The Association has long supported antipollution programs and programs to alert the American people to the ever increasing health hazards of environmental pollution. It stresses the urgent need for expanded research and effective control measures and intends to further extend and intensify its present activities in pollution control. (June 1970)

The AMA recommends maximum feasible reduction of all forms of air pollution, establishment of prevention and control programs at the local, regional or state levels, development of control standards by technological, professional and governmental organizations, and participation by physicians in these programs. (June 1965)

Professional Liability Insurance

The AMA is working to develop a professional liability insurance program, on a state-by-state basis, through joint sponsorship with state medical associations, to provide sound protection for members. It is also working with major liability insurance carriers to establish a professional liability claim information center. (Dec. 1970)

The Association has prepared model remedial legislation for states where existing laws encourage claimants to establish liability and recover substantial damages. The AMA urges state societies to implement the "Suggested Professional Liability Legislation" if local conditions permit. (Dec. 1970)

Quackery

From its inception, the AMA has combated health quackery as part of the AMA's dual mission—to protect the public health and to promote the highest quality of medical care. Proceedings of the first meeting (1847) emphasize, "Physicians, as conservators of the public health, are bound to bear emphatic testimony against quackery in all its forms . . ." In hundreds of official actions and statements since, the AMA has reaffirmed and implemented its determination to expose and eradicate unscientific cultists, mostrums, false claims for therapeutic devices and treatments, diploma mills, food fadism, medical impostors, and all other types of pseudo-medicine. (Dept. of Investigation, April, 1971)

Regional Medical Program

The Heart, Cancer and Stroke Amendments emphasize continuing education of physicians and authorize patient care only insofar as it contributes to this aspect. The

trend in some areas to exceed this authority should be discouraged. Professional judgment does not lend itself to standardization and attempts to impose national standards in such a personal matter as patient care are to be condemned. The House directs the Board to attempt to arrest these trends and to inform state and local medical societies of significant developments. (Nov. 1967)

Sensitivity Training

Although sensitivity training is an issue of current concern, it is not an accepted part of medical practice. The AMA's Council on Mental Health urges that particular caution be taken against participating in sessions conducted by leaders who are not professionally trained and qualified, in view of reports of psychotic and neurotic consequences. (Jan. 1970)

Caution must be exercised in participating in T-groups or sensitivity training sessions. (1) Participation must be voluntary and informed; (2) participants must be screened; (3) clear limits must be set regarding acceptable behavior; (4) individual follow-up should be given. (JAMA editorial, Oct. 27, 1969)

Sex Education

The AMA recognizes that the primary responsibility for family life education is in the home, but also supports the establishment of a voluntary family life and sex education program at appropriate grade levels.

The program should be (1) part of an overall health education program; (2) presented in a way matching the students' maturity; (3) developed within society's values as defined by physicians, educators, clergy and others; (4) previewed by parents who will join with other segments of the community in "ample and continuing involvement" with sex education. (July 1969)

"Sex education: instruction to strengthen family life, to increase self-understanding and self-respect, to develop capacities for good human relationships, to build sexual and social responsibility and to enhance competency for responsible parenthood. It is **not** concerned with sexual techniques or sexual deviations." (July 1969)

Smoking And Health

The AMA takes a strong stand against smoking "by every means at its command", and calls to the attention of Congress the incongruity of simultaneously using tax dollars to provide tobacco price supports and education programs against smoking. (July 1969; reaffirmed Dec. 1970)

The Association urges the FAA to require all public air transportation suppliers to separate nonsmokers from smokers when the size of the aircraft permits. (June 1970)

The AMA recognizes a significant relationship between cigarette smoking and the incidence of lung cancer and certain other diseases. It disseminates educational material on the hazards of smoking to all age groups. (June 1964)

Socialized Medicine

The medical profession is the only group which can render medical care under any system and the medical profession is best qualified to determine how the best medical care can be delivered. The House believes that the medical profession will see to it that every person receives the best available medical care regardless of his ability to pay. and it further believes that the profession will render that care according to the system it believes is in the public interest and that it will not be a willing party of implementing any system which is detrimental to the public welfare. (June 1961)

Utilization Review

The AMA reiterates its support of existing

(Continued on Page 797)

140/90 is normal blood pressure... or is it?

An extensive study based on nearly 4 million life insurance policies suggests that a blood pressure reading of 140/90 requires close medical supervision.

Study Findings. Twelve years ago the Society of Actuaries reported on an extensive study based on the lives and deaths represented by almost 4 million life insurance policies. From this vast survey—"The Build and Blood Pressure Study"[1]—insurance experts concluded that:

- Blood pressure above 140/90 is accompanied by increased morbidity and requires close medical attention.
- Even small increments in either systolic or diastolic blood pressure progressively and steeply shorten life expectancy.

Other Studies. Studies conducted with large numbers of patients since that time have echoed the above findings. Two studies published in 1970—the VA Cooperative Study Group on "Effects of Treatment on Morbidity in Hypertension"[2] and the "Framingham Study"[3]—suggest that treatment of even mild hypertension may, over time, offer significant benefits to the patient.

Another Point of View. Although a growing body of studies suggests that treatment of mild hypertension is warranted, medical opinion is not unanimous. Some clinicians recommend that drug treatment for mild hypertension be reserved for patients with additional risk factors such as smoking, high cholesterol levels, heart or kidney involvement, or a family history of vascular disease. Dr. Walter M. Kirkendall stated this position in his recent paper "What's With Hypertension These Days?"[4] Discussing the management of hypertension in patients with a sustained diastolic pressure up to 100 mm Hg, he said: "Generally, I do not recommend antihypertensive therapy unless patient's blood pressure approaches the upper limit for the group and a number of adverse factors exist, such as male sex, family history of vascular disease, youth, evidence of heart or kidney involvement."



Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

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25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

For a brief summary of prescribing information, please see next page.

1 Society of Actuaries, *The Build and Blood Pressure Study* 1959.
2. Veterans Administration Cooperative Study Group on Antihypertensive Agents, "Effects of Treatment on Morbidity in Hypertension," JAMA *213*:1143-1152, Aug. 17, 1970.
3 Kannel, William B., *et al*: "Epidemiologic Assessment of the Role of Blood Pressure in Stroke – The Framingham Study," JAMA *214*:301-310, Oct. 12, 1970.
4. Kirkendall, Walter M.: "What's With Hypertension These Days?" Consultant, Jan. 1971.

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

CONTRAINDICATIONS: Anuria; increasing azotemia and oliguria during treatment of severe progressive renal disease. Known sensitivity to this compound. Nursing mothers; if use of drug is deemed essential, patient should stop nursing.

WARNINGS: May precipitate or increase azotemia. Use special caution in impaired renal function to avoid cumulative or toxic effects. Minor alterations of fluid and electrolyte balance may precipitate coma in hepatic cirrhosis.

When used with other antihypertensive drugs, careful observation for changes in blood pressure must be made, especially during initial therapy. Dosage of other antihypertensive agents, especially ganglion blockers, must be reduced by at least 50% because HydroDIURIL potentiates their action.

Stenosis and ulceration of the small bowel causing obstruction, hemorrhage, and perforation have been reported with the use of enteric-coated potassium tablets, either alone or with nonenteric-coated thiazides. Surgery was frequently required, and deaths have occurred. Such formulations should be used only when indicated and when dietary supplementation is impractical. Discontinue immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occurs.

Thiazides cross placenta and appear in cord blood. In women of childbearing age, potential benefits must be weighed against possible hazards to fetus, such as fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma. The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

PRECAUTIONS: Check for signs of fluid and electrolyte imbalance, particularly if vomiting is excessive or patient is receiving parenteral fluids. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances. Hypokalemia may develop (especially with brisk diuresis) in severe cirrhosis; with concomitant steroid or ACTH therapy; or with inadequate electrolyte intake. Digitalis therapy may exaggerate metabolic effects of hypokalemia, especially with reference to myocardial activity. Hypokalemia may be avoided or treated by use of potassium chloride or giving foods with a high potassium content. Similarly, any chloride deficit may be corrected by use of ammonium chloride (except in patients with hepatic disease) and largely prevented by a near normal salt intake. Hypochloremic alkalosis occurs infrequently and is rarely severe. In severely edematous patients with congestive failure or renal disease, a low salt syndrome may occur if dietary salt is unduly restricted, especially during hot weather.

Thiazides may increase responsiveness to tubocurarine. The antihypertensive effect of the drug may be enhanced in the postsympathectomy patient. Arterial responsiveness to norepinephrine is decreased, necessitating care in surgical patients. Discontinue drug 48 hours before elective surgery. Orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics.

Pathological changes in the parathyroid glands with hypercalcemia and hypophosphatemia have been seen in a few patients on prolonged thiazide therapy. The effect of discontinuing thiazide therapy on serum calcium and phosphorus levels may be helpful in assessing the need for parathyroid surgery in such patients. Parathyroidectomy has elicited subjective clinical improvement in most patients, but has no effect on hypertension. Thiazide therapy may be resumed after surgery.

Use cautiously in hyperuricemic or gouty patients; gout may be precipitated. May affect insulin requirements in diabetics; may induce hyperglycemia and glycosuria in latent diabetics.

ADVERSE REACTIONS: Rare reactions include thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia, cholestasis, and pericholangiolitic hepatitis. Nausea, vomiting, diarrhea, dizziness, vertigo, paresthesias, transient blurred vision, sialadenitis, purpura, rash, urticaria, photosensitivity, or other hypersensitivity reactions may occur. Cutaneous vasculitis precipitated by thiazide diuretics has been reported in elderly patients on repeated and continuing exposure to several drugs. Scattered reports have linked thiazides to pancreatitis, xanthopsia, neonatal thrombocytopenia, and neonatal jaundice. When adverse reactions are moderate or severe, the dosage of thiazides should be reduced or therapy withdrawn.

For more detailed information, consult your MSD Representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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(Continued from Page 794)

mechanisms such as public grievance and adjudication committees and utilization and peer review committees, as most appropriate and effective for the consideration of fees and the costs of medical and related care. (June 1970)

Physicians can best serve their patients and their profession by accepting, when called upon, membership on utilization review committees that carry out the functions prescribed in the Medicare law. The AMA urges physicians to reject any suggestion that they should receive compensation for performing the ordinary responsibilities expected of them as members of these committees. (June 1966)

Vietnam

At the request of the State Department, the AMA negotiated two contracts with AID. (1) The AMA conducts a project to procure voluntary physicians for two-month tours of service to South Vietnamese civilians. More than 754 Americans have participated. (2) The AMA conducts a program to utilize the resources of U. S. medical educational institutions in bringing technical assistance to medical schools in South Vietnam. (June 1970)

The AMA condemns the action of the government of North Vietnam for denying release of prisoners' names, and refusing communication with the prisoners through reasonable channels. The Association urges the World Medical Association to be instrumental in releasing prisoners' names, inspecting prisoner compounds and distributing medical supplies, food parcels and mail. (June 1970)

Weight Control

There is a significant and increasingly publicized problem with a certain minority of physicians who limit their practice to the treatment of obesity. The use of digitalis, prolonged diuretic administration and toxic doses of thyroid, as well as other potentially dangerous therapeutic modalities, have no rational basis in the treatment of obesity, and the dispensing of such potent drugs for uncomplicated obesity is to be condemned. The AMA will continue its efforts to safeguard and inform the medical profession and the public with respect to the treatment of obesity. (June 1968)

The indiscriminate administration of stimulants such as amphetamine and its derivatives is condemned as dangerous. (June 1957)

Tips to . . .

Prevent Malpractice Claims

EXAMINATION:

Make the most thorough and complete examination possible under the circumstances. Utilize available laboratory facilities and x-ray.

CONSULTANTS:

Do not hesitate to call in specialists for consultation if you think that a specialist's knowledge and services are necessary.

FADS AND HOBBIES:

Do not use or recommend any fad or unproven method of treatment nor "ride a hobby."

RECORDS:

Make sufficient clinical records of diagnosis and course of treatment both in hospital and office.

ABANDONMENT:

Never abandon or neglect a patient without good reason, and then only after timely notice has been given and a qualified substitute rendered.

ASSISTANTS:

Give nurses, interns and other assistants detailed instructions as to method and course of treatment.



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Published Under the Auspices of the Board of Censors

Volume 41 April, 1972 Number 10

What No One Knows, Though Everyone Should, About IPPB Machines

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Dothan, Alabama

Over the past few years, talking with chest physicians, physiologists, anesthesiologists, inhalation therapists, technicians, factory representatives, and salesmen, it has become apparent that no one knows how an IPPB machine really works, how does it take line pressure of 50 PSI and line flow of 130 L/min. and change it to low sensitivity responses of pressures of 15 cm H20. After all, 50 PSI is also 3500cm H20. pressure. No textbook of inhalation therapy or factory manual goes into this detail. The following series is about the way these machines work from wall outlet to patients mouth. An understanding of how they work is necessary for the proper understanding of, and application of, IPPB machines in inhalation therapy.

I. To produce volume air flow through a tube there must be pressure or temperature change at one end or the other. (FIGURE #1) If temperature and pressure are the same at both ends and throughout the tube there is no flow. If the air at end *B* is heated it expands and its density decreases thus creating a pressure difference between the two ends. The cold dense air moves through the tube toward the hot and less dense end of the tube. This is actually a pressure difference due to temperature. If a below ambient pressure (negative pressure) is produced, then there is a pressure gradient between the two ends and air will move from *A* to *B*. If on the other hand, an above ambient pressure is produced (positive pressure) then air will flow from *B* to *A*. There is no way to make air flow through the tube in any other way and keep the tube open.

The chest cage and diaphragm expands the chest cage volume against the elastic collapsing forces of the lungs to produce a negative pressure in the alveolar area during inspiration and thereby causes air to flow in. The chest cage and diaphragm combined with the lung elasticity produces a positive pressure in the alveolus and causes air to flow out of the lungs during expiration.

A respirator is a mechanical means of producing air flow through a tube by changing the pressures at the mouth. This change in

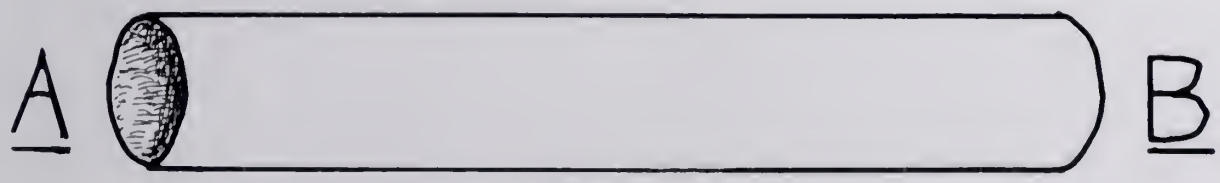


Figure 1

pressure causes air flow into the lungs and stomach. In some instances, the respirator may cause a negative pressure to help the lungs empty.

In patients breathing spontaneously the chest cage and diaphragm are producing a negative and positive phase in the alveolar area. The respirator makes a positive, and in some instances a negative pressure at the mouth. These two pressures must be algebraically added together to arrive at the pressure actually being applied to cause the air flow. It is the pressure difference that causes flow.

An individual producing massive inspiratory and expiratory efforts is producing great changes in the alveolar area. This would cause a larger pressure for flow than the same respirator pressure used to ventilate a patient breathing quietly.

An apneic patient produces no alveolar pressure change, thus larger pressures are needed. All the delivery pressure must be applied at the mouth. Since the alveolar pressure is not as high on expiration a slight negative phase will help to return the expiratory flow to normal.

To produce a pressure and cause volume flow requires some power source. There are several different types of equipment to do this. One is to push a volume through a tube by a piston in a given period of time. With this method the pressures produced are secondary. The other type is one in which a flow occurs until a pre-set pressure is developed, then flow is stopped. This is the intermittent positive pressure machine.

This series will deal with IPPB machines and their principles. The power source for IPPB machines comes from wall oxygen or compressed air lines run at 50 PSI (pounds per square inch-3,499.75 cm H20 pressure) and, if correct tubing has been used, 130 L/min flow is produced. In installations made with one-fourth inch pipe instead of 3/8ths inch pipe, 90-100 L/min may be the maximum potential. Regulators for tanks are designed to release tank volume at 50 PSI and 130 L/min flow. Compressors and pumps should produce 50 PSI and sufficient flow to run the machine.

The IPPB machine must start with this 50 PSI and 130 L/min flow and reduce these to very low pressure and flow that can build up pressure by compression in the lungs without danger.

How is this accomplished? If a tube is hooked to the wall outlet and then this line hooked to a spirometer it will show 130 L/min flow. (FIGURE 2A) If this tube is plugged up by a pressure manometer so that no flow will occur the pressure registers 50 PSI. (FIGURE 2B) Now, if a slight leak is produced so that some of the pressure is allowed to vent off through the leak the flow will reduce the pressure in proportion to the leak size. (FIGURE 3) Now if a flow meter is placed in the line before the leak a pressure lower than 50 PSI is noted. The amount lower depends on the size and volume flow of the leak. If the pressure manometer plugs the tube this time beyond the flow volume leak, flow stops and pressure again equalizes at 50 PSI. Here, again, if a graded leak is placed in this second section *A*, flow is produced and the pressure is reduced in this section in proportion to the flow through the first and second leak. (FIGURE 5) Now going back to Figure 5, if a leak at *B* is large enough though fixed and if the leak at *A* can be controlled as to size and flow then controlling the flow rate at *A* against a fixed leak at *B* allows the pressure in this second unit to be controlled at will within limits available.

With this mechanism a controlled pressure can be obtained from line flow and pressure of 50 PSI and 130 L/min. The larger the leak at *B* (FIGURE 5) the larger the volume flow that can be obtained.

If an on-off valve is added which is easy to turn on and which will turn off when this pressure is obtained this will be an IPPB machine.

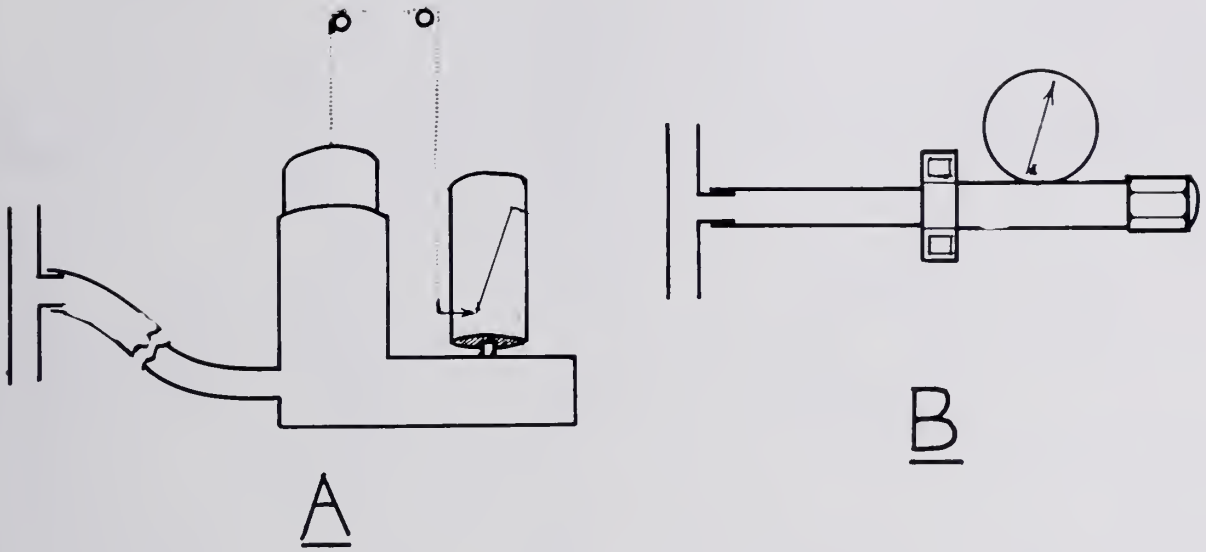


Figure 2

In Figure 6 an on-off valve has been added; this valve moves in a closed system due to a rotating fin that will move when a negative pressure is produced in the system. (FIGURE 6) As the patient breathes in, negative pressure beyond *C* will turn it on as at *B*. As pressure builds up to just a little above pre-set pressure, this puts back pressure on the fin and causes the valve to turn off again.

A review follows at this point. Flow through leak *A* is controlled so that pressure in the chamber between *A* & *B* (with a fixed leak) is the desired pressure. The pressure here is monitored. A rotating valve sensitive to slight negative pressures turns into the on position when the patient breathes in and allows flow.

In working with patients it soon becomes evident that with this system the source gas is oxygen, and pure oxygen is not wanted. Some method must be devised to reduce the oxygen concentration. This is done by a venturi.

If a leak at *B* is instead made a venturi jet, then as oxygen moves through the venturi it will intrain (suck in) air from the outside around the mouth of the venturi. The size of the opening and speed of flow and pressure in the chamber between *A* & *B* will determine the amount of intrained flow that will occur.

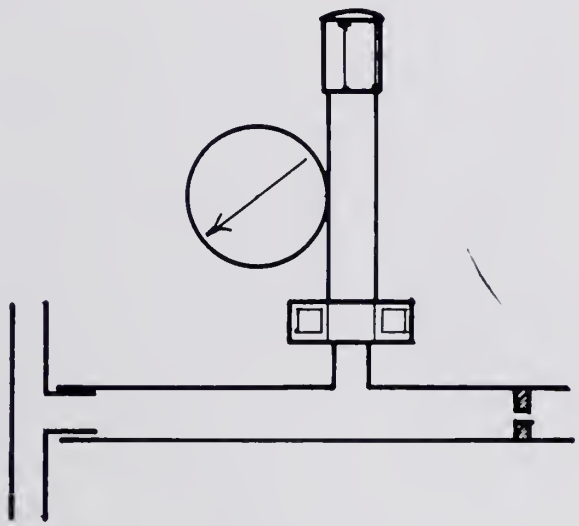


Figure 3

Now by diverting the flow from controlled leak *A* and putting it through a venturi jet then air-oxygen mixing will occur through the venturi. This same venturi then will become the leak *B* when the on-off valve is in the off position. (FIGURE 7) Now there is a way of adjusting the machine to air or oxygen.

Next, the oxygen or air-oxygen mixture should be humidified, thus a humidifier is necessary. If a flow is taken off before Leak *A*, run through a nebulizer or humidified, then added at the mouth of the patient, the

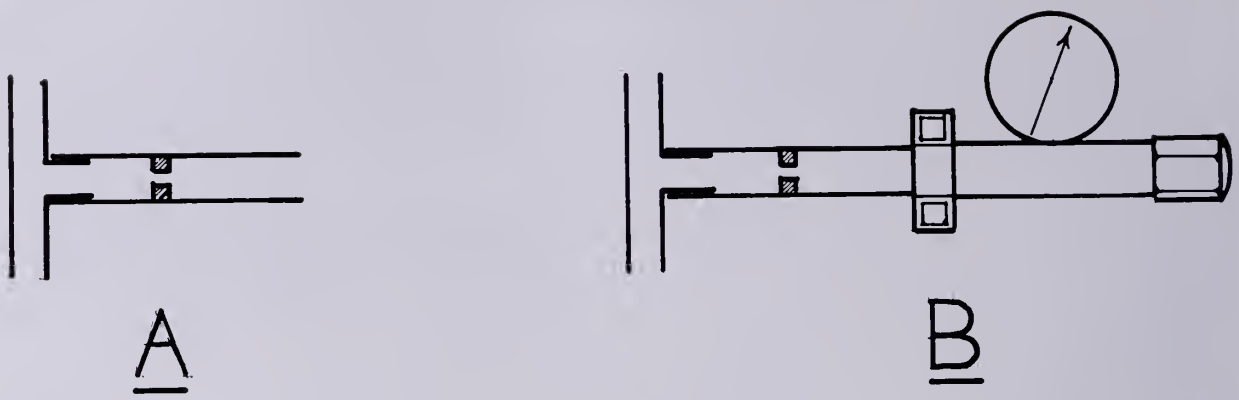


Figure 4

proper humidity can be added. This is what is done. (FIGURE 8)

Finally, arrangements have been made to allow the patient to have controlled pressures, air-oxygen mixtures, and humidified gases. He breathes in well, but how is he going to breath out? There must be an opening at or near the mouthpiece that will open on breathing out but stay closed on breathing in. The usual methods used for face masks, hand bags, respirators, etc., will not work since a positive pressure is being built up during inspiration that would open it up. The solution is to add an air filled bag over an opening that deflates during expiration and inflates during inspiration. A line is run from the patient side of the on-off valve to a balloon over the opening so that when the on-off valve is *on* the bag fills rapidly from the positive pressure in the chamber between leaks *A* & *B*. When it moves to the *off* position the bag deflates.

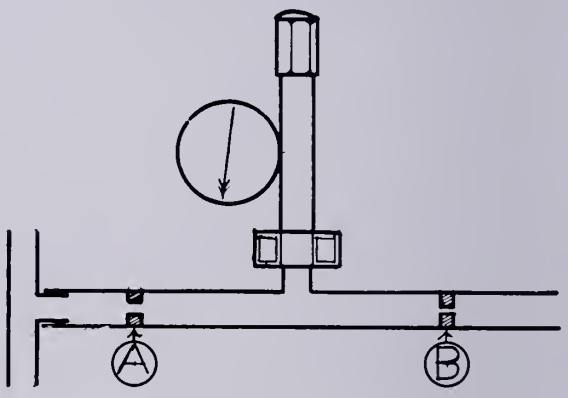


Figure 5

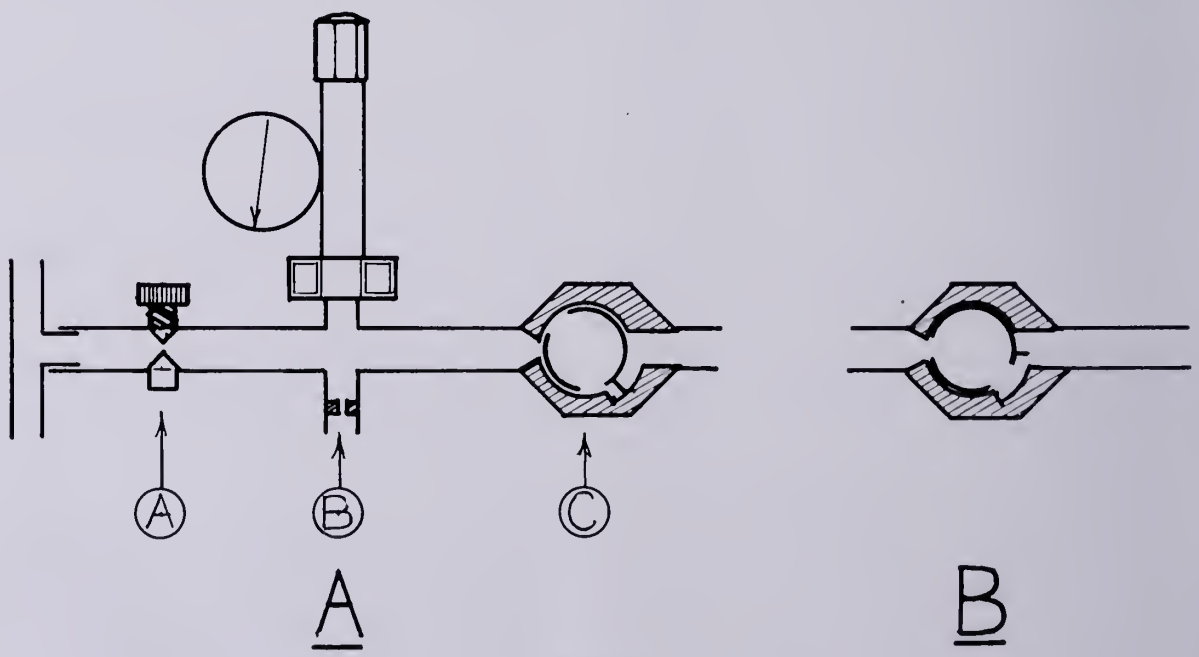


Figure 6

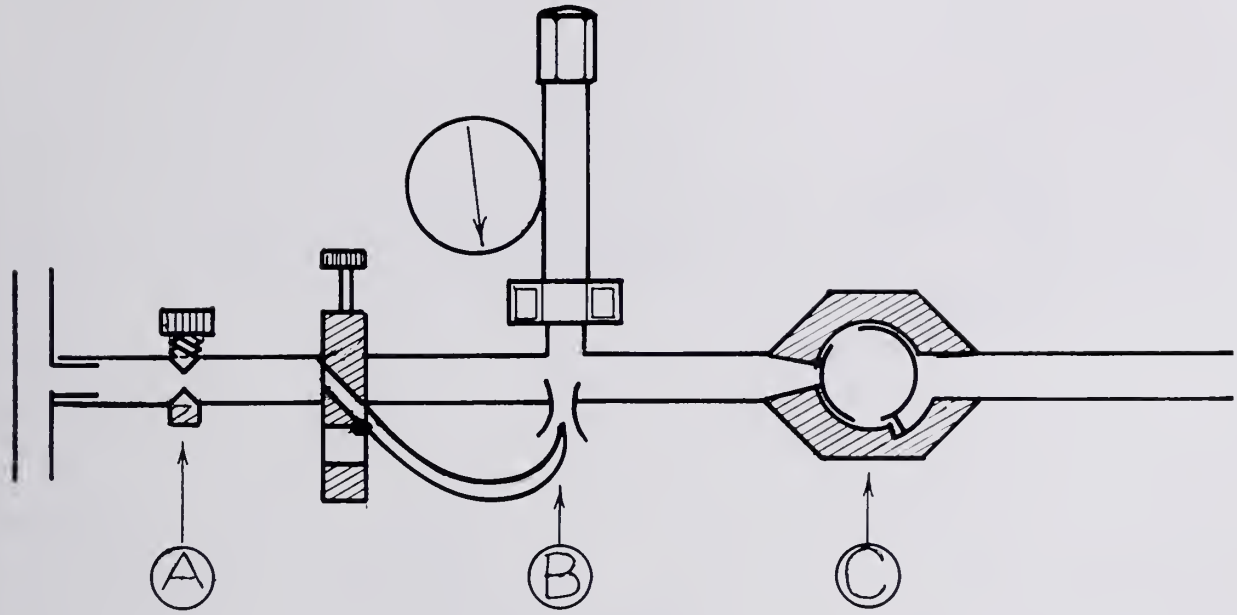


Figure 7

(FIGURE 9) Now the machine is complete. The line pressure is reduced, pressure is controlled, air-oxygen mixture is achieved, the mixture is humidified, a method of turning the machine on and off is achieved, and control of expiratory flow has been provided.

This is the basic premise on which the Bennett IPPB machine was developed. Some changes had to be made to fit it more properly to clinical use. For the next discussion refer to *Flow Diagram ‡1.* Stage one is a diagram of leak *A, venturi B* and the chamber where cycling pressure is set. Flow starts from the line and enters the control valve area. This is better seen in *Stage 2,* at *A.* Riding in the middle of the line flow inlet is a rod with a wheel and rubber linings. The opposite end is pressed by a rocker arm with a spring to keep it closed. The lower end of this arm is in contact with a roller attached to a rubber diaphragm which is controlled by a knob (the pressure setting knob). As the knob is turned inward a spring between the knob and diaphragm pushes the wheel against the rocker

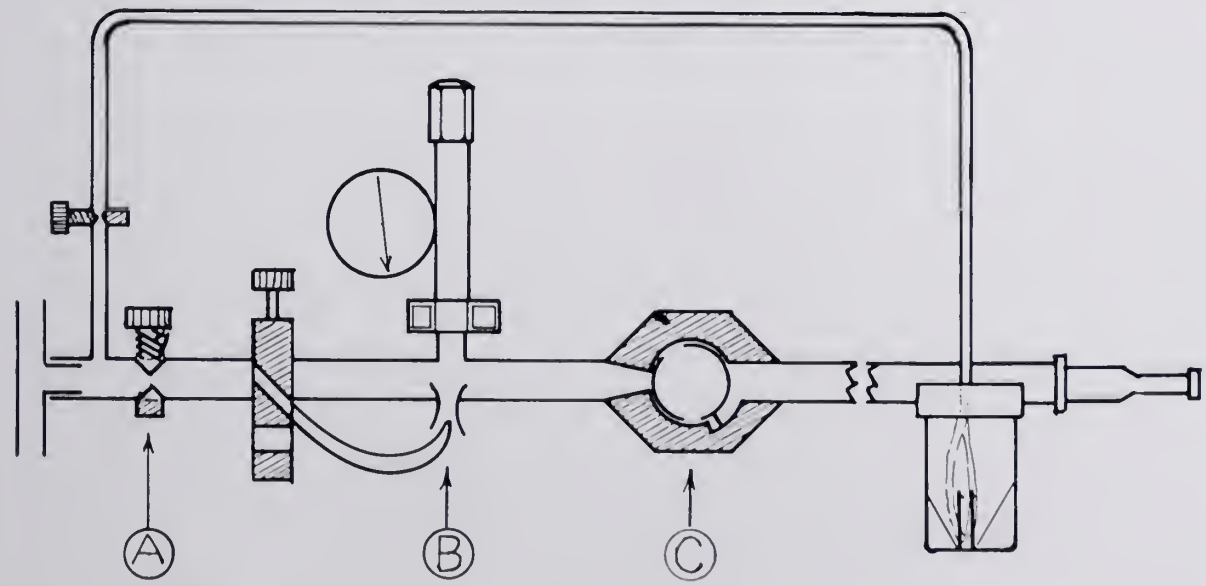


Figure 8

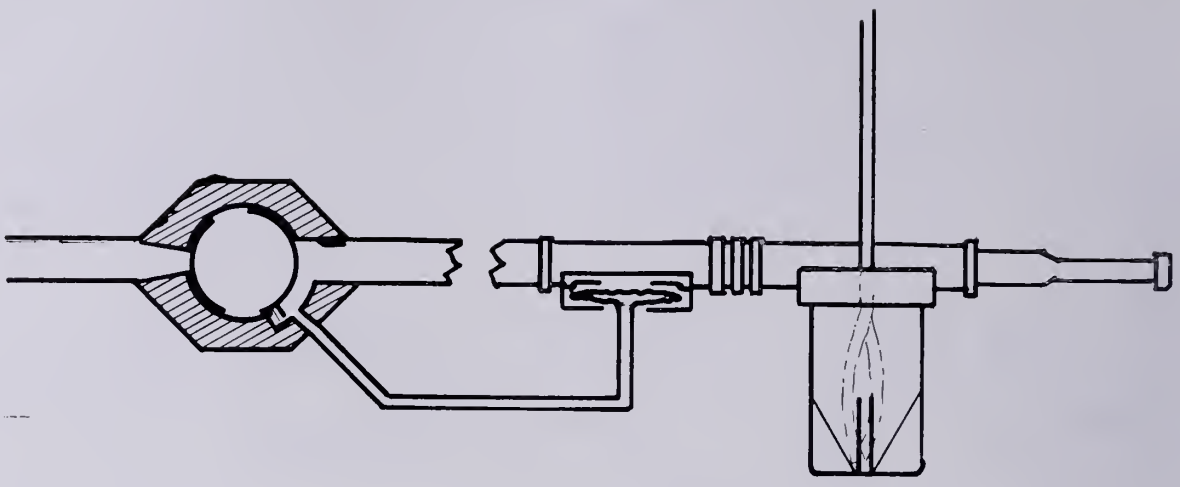


Figure 9

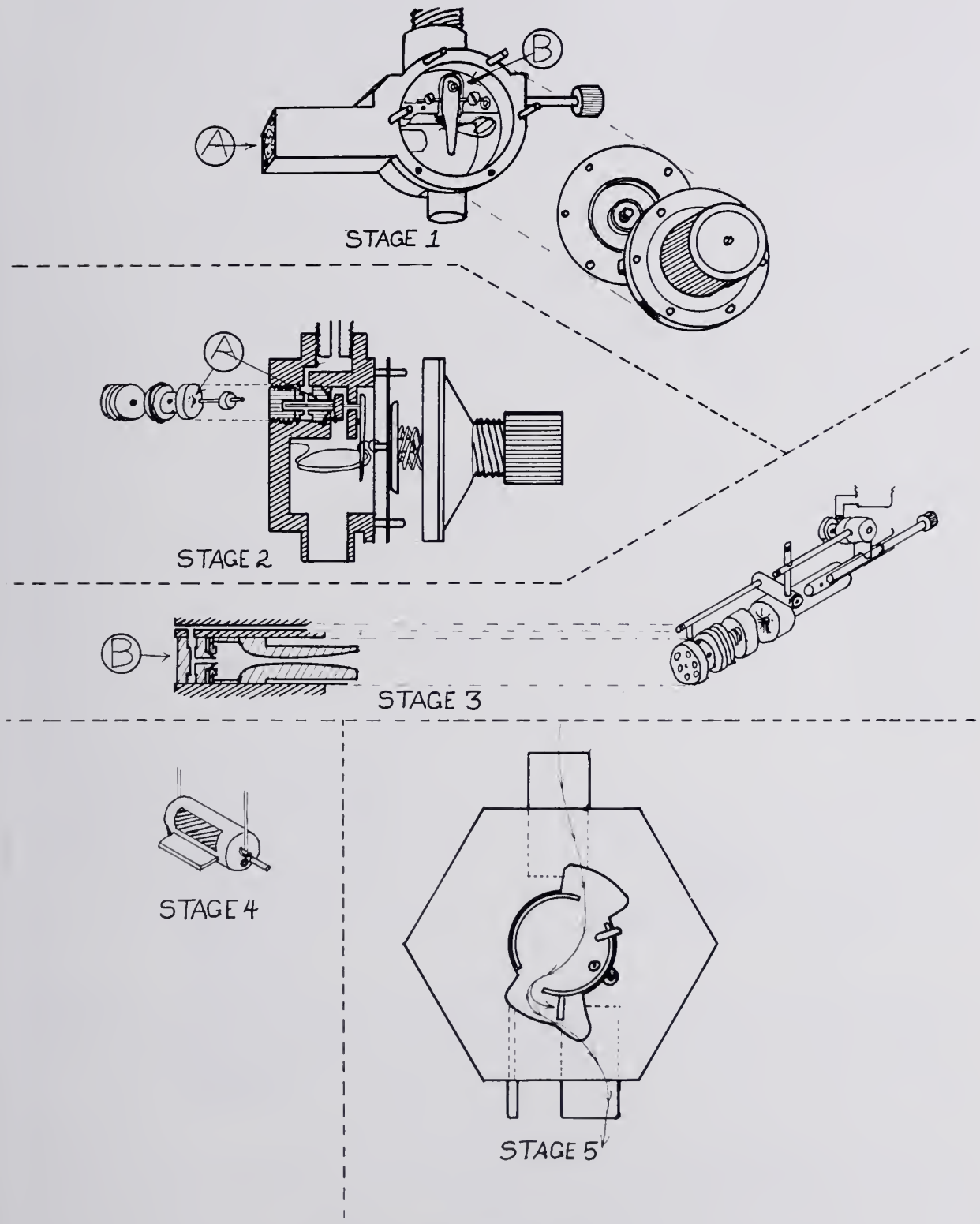
arm. This overcomes the pressure of the spring causing closure. This in turn allows line pressure and flow to leak in through leak *A*. As this is occurring, pressure builds up. This pushes the rubber diaphragm toward the knob allowing the rocker arm spring to partially close the opening at *A.*, and the pressure is set with a smaller flow during the expiratory phase. When the on-off valve is turned on, the pressure drops and this pressure drop plus the diaphragm spring between the pressure setting knob and diaphragm pushes the diaphragm toward the rocker arm pushing it and causing it to increase flow during inspiration. As inspiration ends and flow is blocked then pressure builds up again pushing the diaphragm back and reducing flow to expiratory level again. Thus, low flows are used during expiration and satisfactory flows are obtained during inspiration.

With the air-oxygen mix valve pushed in to block straight flow into the expiratory positive pressure setting chamber the flow must go through the venturi jet. This is depicted in *Stage 3* of flow diagram ♯1. A cross-section of the venturi and an explode diagram is shown. It should be noted that the venturi flows both on air-oxygen mix and 100% oxygen. Flow when on 100% oxygen is less due to the easy exit out the larger tube. Low flow occurs during expiration and builds up during inspiration to cut off when the diaphragm is pushed and the rocker arm cuts off again in response to the low inspiratory flow.

Next, the flow goes to the on-off valve. Here, the drum with fin has a weighted rod *X* (see stage 4) which falls to the bottom when unsupported. In the normal position as seen in *Stage 5*, a slight negative pressure on the patient side causes the fin to move. Flow starts from the positive pressure setting chamber and pushes the fin into the full "on" position. Flow continues until back pressure on the patient side allows pressure to equalize on both sides of the fin. This allows the weighted portion which is very much off balance to fall by gravity and shut the machine off.

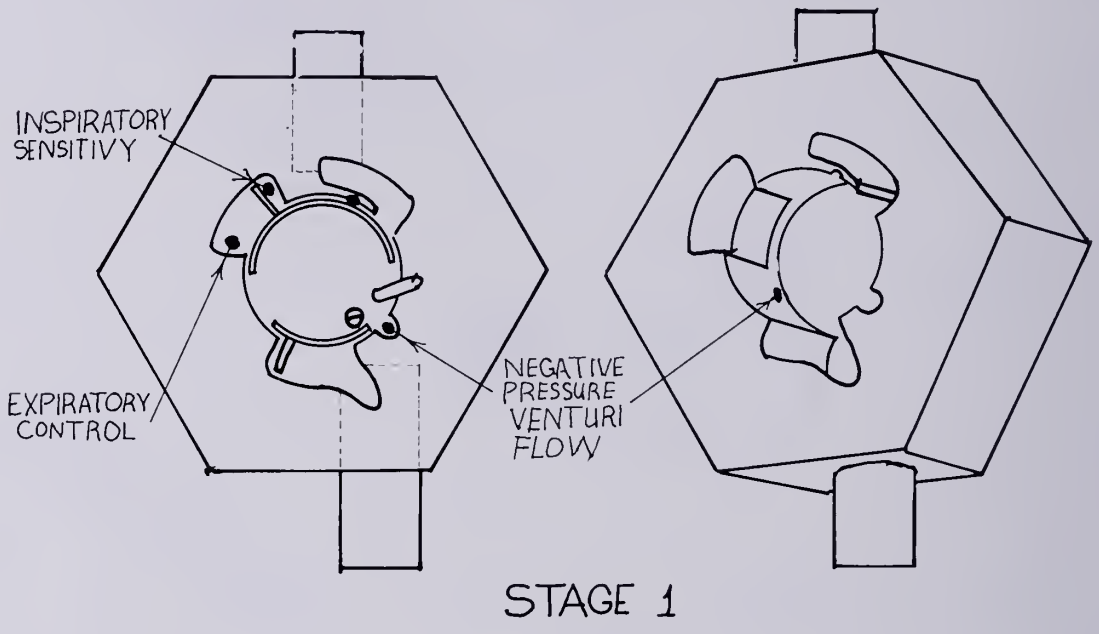
The volume of machine, tubing, and mouthpiece in which pressure must be built up to produce cut off pressure, will with the flow rate, determine the rate of which volume will be compressed to produce cut off pressure. The positive pressure setting chamber is 60 cc. The tubing between this chamber and the on-off chamber is 5 cc. after connected. The on-off chamber is 20 cc. The line between on-off chamber and tubing is 30 cc. The tubing volume is 300 cc. The mouthpiece and exhalation valve with mouthpiece is 30 cc. This gives a total of 450 cc. in the line with effective flow rate other than intrainment of 45 L/min. Thus pressure builds up rapidly.

This is the way the Bennett PR-1 and



Flow Diagram No. 1

PR-2 work. The home unit works on a simpler principle, that is, pressure limiting. If this machine is held on after a normal inspiration (obstructive technique), due to the large venturi flow and nebulizer flow, pressure rapidly rises to 50-60 cm H20. It rises toward the 50 PSI line pressure. However, flow out of the exhalation valve and back through the venturi is so large despite the balloon only 50-60 cm H20 can be obtained. The line flow (jet plus nebulizer) is 45 L/min minimum and rises to 55 cm H20 in about 5-6 seconds. This is too short to be effective in obstructive or plateau technique. The peaking-out pressure is sufficiently high to cause interstitial emphy-



Flow Diagram No. 2

TABLE #1

Pressure cmH20	Air-oxygen no nebulizer	100%oxygen no nebulization	air-oxygen mix with nebulizer	100%oxygen with nebulizer	Nebulizer line flow only100% 02	Air-oxygen mix nebulizer only	Jet flow only-air 02mixture	High flow 02% air only full open
15 cmH20	81L/min	66L/min	102L/min	78L/min	54L/min	48L/min	24L/min	45%
20 cmH20	93L/min	75L/min	111L/min	90L/min	48L/min	48L/min	18L/min	55%
30 cmH20	111L/min	90L/min	126L/min	105L/min	48L/min	48L/min	18L/min	60%
40 cmH20	111L/min	99L/min	126L/min	108L/min	48L/min	48L/min	18L/min	60%
50 cmH2o	111L/min	102L/min	126L/min	111L/min	48L/min	48L/min	18L/min	60%

sema, thus, this technique is dangerous and should not be done with this machine.

Next, refer to Table #1 for flow statistics. Flow varies from 81 L/min at 15 cm H20 pressure to 111 L/min at 50 cm H20 pressure, part of this being intrainment. The venturi jet runs at about the same flow rates. The pressure behind it rises as the rocker arm is pushed in farther for higher cycling pressures and thus the force of the flow is increased causing some increase in intrainment. Here total flow venturi jet, venturi, and nebulizer is from 102 L/min at 15 cm H20 to 126 L/min at 50 cm H20 pressure. Nebulizer flow is from 20 L/min at 15 cm H20 to 15 L/min at 50 cm H20. This occurs because of the restriction and the back pressure caused by bubble jet tube length and size. This is also due to increasing ease of flow through leak *A* of the machine.

When the machine is switched to 100% oxygen the flow from the inlet to the positive pressure chamber is so great that easy flow occurs. Less flow through the nebulizer occurs and pressure drops at line level slightly so that the pressure head drops and nebulizer flow drops. Thus, on 100% oxygen 15 cm H20 flow is 78 L/min of which 15 L is nebulizer. At 50 cm H20 111 L/min is obtainable of which 9 L/min is nebulizer flow.

Nebulizer flow must humidify the flow through the machine. On air-oxygen mixture at 15 cm H20, jet flow is 24 L/min; nebulizer flow is 20 L/min, making a total line flow of 44 L/min. Total flow has 58 L/min (102-44=58L/min) flow by intrainment. If the

TABLE #1 continued

High flow Pressure cmH20 Ft. manometer	Pressure cmH20 Positive manometer	Flow control decreased flow 02% concentrate fully decreased	pressure patient side	Pressure positive pressure side	machine flow during expiratory period	nebulizer flow-nebulizer input	leak out negative pressure tube	nebulizer flow 100% oxygen
3 cmH20	9 cmH20	84%	0	13cm	0.8L/min	18-20	3L/min	15 L
3 cmH20	12 cmH20	84%	0	18cm	1.0L/min	15-18	3L/min	15L
4 cmH20	14 cmH20	84%	0	27cm	1.2L/min	15-18	3L/min	15L
4 cmH20	15 cmH20	84%	0	36cm	1.6L/min	15	4L/min	9L
4 cmH20	14 cmH20	84%	0	44cm	2.0L/min	15	5L/min	9L

room air had 50% relative humidity then it is one-fourth what would be needed at body temperature or 43.5 L/min to be humidified. Nebulizer flow is continuous so this would account for 20L. Inspiratory flow would only be during inspiration thus one-third of the flow and jet flow 8L/min three-fourths intrainment during the inspiratory flow would be 14.5L thus 20+8+14.5=42.5 L/min. total to be humidified. At body temperature it takes 0.044 cc/L to humidify air or for this actual 42.5L dry gas delivery 0.044×42.5=1.87 cc. water/min to humidify the flow to the patient at body temperature. At 15 cm H20 the machine nebulizes 0.6 cc/min. This is not sufficient to produce 100% humidity. Medication would be concentrated to a maximum in an attempt to humidify. When put through a 12 inch 12 mm tube heated to body temperature no mist was visually delivered beyond.

The first part of inspiration on this machine consists of developing an inspiratory flow rate greater than nebulizer flow. After this has been developed then negative pressure can be developed to turn the machine on. This portion of inspiration delivers moisture at low flow rates.

This machine has a flow rate control which is a diaphragm-like constriction that can be applied below the on-off valve. This acts mainly to stop intrainment flow of the venturi and allow only jet flow to pass. Refer to the % oxygen concentrations in Table #1, high flow and low flow. They range from 40-45%-80% on this obstruction. The two manometers register 3 cm H20 pressure on the patient side and 9 cm H20 in the positive pressure side of the on-off valve at 15 cm H20 pressure, with the machine on and no back pressure. At 50 cm H20 pressure these settings are 4 cm H20 patient side and 15 cm H20 pressure side. When the flow rate control is turned full on, pressures on the patient side fall to zero due to turbulence at this new obstruction and at 15 cm H20 pressure the pressure setting manometer shows 13 cm H20, this being the pressure putting back pressure on the venturi. At 50 cm H20 the manometer goes to 44 cm H20.

This same type situation occurs when using intubation tubes. This machine will produce back pressure on the venturi raising the oxygen concentration by dampening venturi back pressure (See Table #2) A 12 mm tube (tracheal size) produces 45% oxygen concentrations with 5 cm H20 patient side back pressure and 10 cm H20 positive pressure chamber pressure. An 8.5 mm tube goes to 50% oxygen concentration, 8 cm patient pressure and 11 cm positive pressure cham-

TABLE # 2

	At 15 cm H20 pressure							PR2 with new phase tube	
TUBE SIZE	volume flow through tube	Oxygen % concentration	Pressure Patient Side	Pressur Positiv Side	Difference in 102 & volume flow in tube	Minimal possible flow	out exhalation valve	not working out neg. flow tube	out exhalati valve
12 mm tube	86L/min	45%	5cmH20	10cmH20	16	44	0	3L	0
9.5	78L/min	48%	6cmH20	10.5cmH20	24	44	0	3L	0
8.5	63L/min	50%	8cmH20	11cmH20	39	44	0	3L	0
7	48L/min	65%	9cmH20	12cmH20	54	84	0	3L	0
6	39L/min	100%	12cmH20	13cmH20	63	44	5L/min	4L	1L
5	24L/min	100%	13cmH20	15cmH20	78	44	20L/min	5L	15L
4	18L/min	100%	15cmH20	17cmH20	84	44	26L/min	6L	20L
3	----	---	----	-------	---	---	---	---	----
2.5	----	----	----	----	---	----	---	---	-----
2	---	----	----	-----	----	----	----	-----	----

ber pressure. This machine with back pressure will produce 18 L/min flow through a 4 mm endotracheal tube in a situation in which the pressures are 15 cm H20 on the patient side and 17 cm H20 on the positive pressure side. The machine, due to these build-ups by the tubes becomes more sensitive to recycling and thus it is very hard to ventilate through tubes smaller than 7 mm size. The flow is lower than line and nebulizer flow through these small tubes. The back pressure, when it gets to 100% oxygen concentration, starts putting flow out the exhalation valve though it is closed and the venturi gets a back flow. Thus the difference of 45 L/min minimal line flow and 18 L/min through the tube, goes out the exhalation valve, venturi, and block leaks during the inspiratory phase.

The oxygen requirements per minute can be computed. In Table #1 *expiration machine flow* shows 800 cc at 15 cm H20 and 2,000 cc at 50 cm H20. Thus, minute oxygen requirements would be as follows: expiratory machine flow ¾ths of the time at 600 cc/min., nebulizer flow 20,000 cc/min., jet flow 1/3rd of the time at 8,000 cc/min. or a total of 20,000+8,000+600=28,600 cc/min. This adds up to 1516 L/hour or 36,384 L/day.

The PR-2 differs in some respects from the PR-1. The on-off block is changed, an extra fin is added for automatic controlling, and sensitivity control. (Demonstrated in *Flow diagram #2, Stage 1A, and Stage 2.*) An extra slit has been added to control negative pressure flow during expiratory phase. (Stage 1B+A) and (*Stage 2*) Sensitivity control and automatic cycling is done with "Flow Accumulators," three of which are put on top of the machine. The control is fed from a needle valve type (pinch type) control. These adjust according to flow to various levels so that volume and rate of flow between the various three components and the on-sensitivity and off valve is controlled in time *Flow Diagram #2 Stage 3.* The reams of tubing connections are a real crossword puzzle to figure out, and they will not be presented further.

The negative phase is controlled by a venturi, pinch valve operated which flows from one side of the on-off block through the drum in the off position only to the hole opposite the other opening in the off position. This feeds the venturi that produces the negative phase. The negative phase venturi jet flow at 3 cm negative pressure is 24 L/min. Total flow from jet and mouthpiece is 46 L/min. The negative phase must exit the 20 L/min nebulizer flow and then produce sufficient flow to produce 3 cm negative pressures.

The opening between the mouthpiece and exhalation valve that the negative phase tube comes off of is open as the patient breathes out or in normally. As pressure is built up flow out this tube with back pressure is 3 L/min. As pressure builds up it increases slightly. On expiration it competes with the exhalation valve for exit of air. Here, moisture can build up as rebreathing does occur during the first portion of inspiration before the machine cuts on. This is a significant disadvantage in leaving this section in unless negative pressure is to be used.

Finally, there is a terminal flow accelerator. This simply neutralizes the flow sensitivity feature of the on-off valve and produces an abrupt cut off with premature shortening of the inspiratory phase.

These are the basic principles and flow pattern of the Bennett.

In following articles to be discussed will be the Monaghan, the Retec, and the Bird machines. Also the home units now in use will be discussed.

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Beef Broth	25	Vegetable	77
Consomme	33	Tomato	79
Chicken with Rice	49	Cream of Asparagus	80
Chicken Gumbo	55	Cream of Chicken	87
Chicken Noodle	62	Beef	99
Chicken Vegetable	68	Cream of Potato	105
Turkey Noodle	72	Cream of Mushroom	131
Vegetable Beef	75	Green Pea	131

In planning high or low calorie diets, Campbell's more than 50 different soups offer you a wide choice. And, most of Campbell's Soups contain a wide variety of ingredients that can serve as supplementary sources of many essential nutrients.

* From "Nutritive Composition of Campbell's Products" which gives values of important nutritive constituents of all Campbell's Products. For your copy, write to Campbell Soup Company, Dept. 536, Camden, New Jersey 08101.

There's a soup for almost every patient and diet ...for every meal and, it's made by Campbell

the 3 phases of Eve



All women are not equal in their endogenous hormonal output. And, while all oral contraceptives are fundamentally effective, they exhibit **differences in their activity levels and estrogen-progestogen ratios that affect different women differently**—in both short and long-term use. Some brands may be insufficient for the woman's needs or else may exceed them.

Searle offers a family of O.C. products that covers the range of women's needs to help you provide the right pill for the right woman at the right time.

References **1.** Editorial. Oral Contraceptives. Which Pill for Which Patient? Patient Care 3:90-115 (Feb.) 1969 and 4:135-145 (June 15) 1970. **2.** Greenblatt, R. B. Progestational Agents in Clinical Practice, Med. Sci. *18*:37-49 (May) 1967. **3.** Kistner, R. W. Gynecology: Principles and Practice, ed. 2, Chicago, Year Book Medical Publishers, 1971. **4.** Kistner, R. W. The Pill: Facts and Fallacies About Today's Oral Contraceptives, New York, Delacorte Press, 1968. **5.** Nelson, J. H. Clinical Evaluation of Side Effects of Current Oral Contraceptives, J. Reprod. Med. *6*:50-55 (Feb.) 1971. **6.** Orr, G. W. Oral Progestational Agents: Therapy and Complications, S. Dakota J. Med. *22*:11-17 (Jan.) 1969.

the Ovulen phase

Most women* with a **balanced hormone profile and normal menses** do best on a middle-of-the-road pill that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts, feminine appearance, healthy skin and hair. Vaginal cytology slide—balanced "pink and blue.")

Some women having problems on other O.C.s might do well on Ovulen.

Ovulen has a distinctive hormonal balance that combines moderate estrogenic activity with a slight progestogen dominance. It has an excellent record of patient acceptance.

Ovulen®

Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg.

SEARLE

For brief summary of prescribing information, see following page.



the Demulen phase

Many women* who secrete **more estrogen** than most do well on a pill with lower estrogen activity and an increased progestogen overbalance.

(*Typical clues—shorter, plumper, full-breasted, with glowing skin and no wrinkles. Vaginal cytology slide "pink.")

Some women with special conditions that may be aggravated by higher estrogen-activity products may do better on this ratio.

Demulen combines minimal estrogenic activity with a moderate ratio of progestogen overbalance. It is particularly well suited to the young when low-dose (activity) is preferred. Demulen offers little risk of the most potent progestogen side effects; early breakthrough bleeding is often transient.

Demulen®

Each white tablet contains ethynodiol diacetate 1 mg, ethinyl estradiol 50 mcg.
Each pink tablet in Ovulen-28™ and Demulen™ 28 is a placebo containing no active ingredients.
Both Ovulen and Demulen are available in 21 and 28 pill schedules.

the Enovid-E phase

Some women* who secrete **less estrogen** than most do best on a pill with a moderate estrogen overbalance.

(*Typical clues—oily complexion, acne, hirsutism, masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome	intermittent depression
early-cycle bleeding	increased appetite
scanty menses	steady weight gain

vaginal candidiasis

Enovid-E not only provides increased estrogenic activity with low progestogen activity, but also contains the only progestogen that is not antiestrogenic. Therefore it offers less risk of high-dose progestogen side effects.

Enovid-E®

Each tablet contains norethynodrel 2.5 mg, mestranol 0.1 mg.

Oral contraceptives are complex medications and, after reference to the prescribing information, should be prescribed with discriminating care.

for the 3 phases of Eve:

a family of O.C. products

Ovulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Demulen®

Each white tablet contains:
ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

SEARLE Products of SEARLE & CO.
San Juan, Puerto Rico 00936

Enovid-E®

norethynodrel 2.5 mg./mestranol 0.1 mg.

Actions—Enovid-E acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Enovid-E depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Indication—Enovid-E is indicated for oral contraception.

The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

SEARLE **Enovid-E®**

brand of norethynodrel with mestranol

Product of G. D. Searle & Co.
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began

Program

of the

111th ANNUAL SESSION

of the

MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

JEFFERSON DAVIS HOTEL—MONTGOMERY

APRIL 20, 21, 22, 1972

The 111th Annual Session of the Medical Association of the State of Alabama will convene at 9 a. m., on Thursday, April 20, 1972, in the Civic Room (mezzanine floor) of the Jefferson Davis Hotel, Montgomery, Alabama.

The opening session will be called to order by Archie E. Thomas, M. D., President of the Association. It will be followed by the Orientation Program for new members with Frank M. Phillippi, Jr., M. D., President-Elect, presiding.

Three scientific sessions will be held, also in the Civic Room, featuring outstanding speakers.

Registration

The registration desk for Counsellors, Delegates and members of the Association will be located at the entrance to the exhibit area in the Davis Room (ground floor) of the Jefferson Davis Hotel.

The Registration desk will be open from 8:00 a. m., until 5:00 p. m., on Wednesday, Thursday and Friday, April 19-20-21.

For the Annual Business Session on Saturday, April 22, the Registration desk will be located in the Lobby of the Jefferson Davis Hotel from 7:30 a. m. until 10:30 a. m.

Counsellors and Delegates may register in advance and claim their badges, a copy of the official program and any other material upon which they will be called to make decisions after signing the official registration card at the Registration desk.

Members and guests also will be required to sign official registration cards, which may be obtained at the Registration desk at places and times stated in Paragraph two above.

Exhibitors Registration

Representatives of Scientific and Commercial exhibitors may register at the Registration desk beginning at 1:00 p. m. on Wednesday, April 19.

Badges

No person will be admitted to any scientific, business or social session of the Association, or to the exhibit area, unless wearing an official badge.

Speakers

Speakers will be called in the order in which they appear on the program. Should a speaker be absent when called, his paper will be passed and called again upon conclusion of the program.

Hotel Reservations

The headquarters hotel will be the Jefferson Davis Hotel. Priority for the limited number of rooms available has been assigned to Counsellors, Delegates, Officers of the Association and guest speakers. When the supply of rooms is exhausted, applicants will be referred to other nearby hotels and motels.

Social Events

A full listing of social events of the 111th Annual Session will be published in the official program, available at the time of registration.

Tickets

Tickets for social events should be purchased in advance if possible. Otherwise, a limited number will be available at the Registration desk.

Specialty Groups

Scientific presentations of medical specialty groups will be scheduled either before or after the Annual Session in conformance with the Constitution and Ordinances which forbid this type of meeting during the three days allotted to the Annual Session. Social events for specialty groups and alumni organizations will be held at places and times to be announced in the official program.

Auxiliary Luncheon

The Woman's Auxiliary to the Medical Association of the State of Alabama will hold a luncheon on Thursday, April 20, at 12:15 p. m., at the Whitley Hotel honoring Mrs. G. Prentiss Lee, President of the Woman's Auxiliary to the American Medical Association and Mrs. Raymond E. Jones, President of the Woman's Auxiliary to the Southern Medical Association.

Presentation of the annual AMA-ERF contribution to Dr. John M. Packard for the University of Alabama School of Medicine will be made by Mrs. Howard Johnson, Sheffield, AMA-ERF Chairman.

The principal speaker will be Mr. Winton M. Blount.

Medical Society of Montgomery County Reception, Dinner, Entertainment

The Medical Society of Montgomery County will be hosts at the RIVERBOAT PARTY, including cocktails, buffet dinner and entertainment on Thursday, April 20, at 6:00 p. m., in the Ballroom of the Jefferson Davis Hotel. Tickets are $10 per person and may be purchased at the Registration desk.

ALAPAC Luncheon

The annual ALAPAC Luncheon will be held in the Ballroom of the Jefferson Davis Hotel at 12:30 p. m., on Friday, April 21, 1972, with State Senator Roland Cooper as principal speaker. Consult the official program for additional information.

Awards Dinner

The Awards Dinner will be held in the Ballroom of the Jefferson Davis Hotel at 7:00 p. m., on Friday, April 21. The dinner will be sponsored by the Committee on Public Relations in honor of the winners of the 1972 awards, past presidents and members of the Fifty Year Club. The following new members will be inducted into the Fifty Year Club:

Robert Mitchell Brannon, M. D.
Sidney Wixforth Collier, M. D.
Harry Reed Farmer, M. D.
Herbert Foster Gaines, M. D.
Tinsley Randolph Harrison, M. D.
Henry Floyd Martin, M. D.
Harry Sam Rowe, M. D.
Richard Olney Russell, Sr., M. D.
Harold Ewart Simon, M. D.
Samuel Patrick Wainwright, M. D.
James Ezekiel Whitaker, M. D.

Awards will be presented by E. W. Stevenson, M. D., Chairman of the Committee on Public Relations, to the following:

Douglas L. Cannon Medical Reporter Awards to reporters, editors or publishers, of an Alabama newspaper, or to radio-television personalties who have shown excel-

lence in factual reporting of medical news and for the outstanding efforts in elevating medical news coverage: Harold E. Martin, Editor and Publisher of the Montgomery Advertiser, Montgomery.

S. Buford Word Award for the physician who has rendered outstanding service to his community above and beyond his professional call of duty: William J. Pitts, M. D., Birmingham.

William Crawford Gorgas Award to the citizen of Alabama who is not actively engaged full time in the field of health and who has rendered outstanding service: Joe Bruno, Birmingham.

The principal speaker will be Wesley W. Hall, M. D., President, American Medical Association, Reno, Nevada.

Other Events

Exhibitors Reception

The annual reception for representatives of exhibitors at the 111th Annual Session will be held from 4:00 p. m., to 5:00 p. m., on Wednesday, April 19, in the Davis Room of the Jefferson Davis Hotel. Officers and members of the Board of Censors and Board of Trustees will be hosts at this reception.

Hosts of the Association

Official hosts of the Association will be the Medical Society of Montgomery County, E. F. Campbell, M. D., President. A Host Committee will be assigned to provide transportation and escort for visiting dignitaries.

Board of Trustees

The Board of Trustees will meet at 9:00 a. m., on Wednesday, April 19, in the Senate Room (mezzanine floor) of the Jefferson Davis Hotel to hear discussions on any and all matters of business to be presented at the 111th Annual Session. All Counsellors, Delegates and members of the Association are cordially invited to sit with the Board of Trustees and to present their views on matters under consideration.

Board of Censors

The Board of Censors will meet at 9:00 a. m., on Wednesday, April 19, in the Capitol Room (2nd floor), of the Jefferson Davis Hotel to transact official business concerning the State Board of Medical Examiners and the State Committee of Public Health. Upon completion of discussions relating to the Board of Medical Examiners and the Committee of Public Health, the Board of Censors will convene to officially consider Association Affairs, including matters referred by the Board of Trustees.

Alumni Meetings

Tulane Alumni Reception will be held Thursday, April 20, at 6:00 p. m., in the Senate Room of the Jefferson Davis Hotel.

Vanderbilt Alumni Reception will be held Thursday, April 20, at 6:00 p. m., in the Jefferson Room of the Jefferson Davis Hotel.

University of Alabama Alumni reception and business meeting will be held on Thursday, April 20, at 6:00 p. m., in the Civic Room of the Jefferson Davis Hotel.

(Continued on Page 822)





The Bradley Center --- for the problems of living

An all new homelike open psychiatric residence on a lovely five-acre tract, centrally located within the community, providing a comprehensive range of continuous services, including in-patient, day care, and outpatient treatment. Each patient participates in an extensive and intensive treatment program, based almost exclusively upon multiple psychotherapeutic encounters. These include individual psychotherapy, group psychotherapy, the nursing milieu, occupational therapy, recreational therapy, topical small group discussions, and other group activities in the Center, as well as in the community, depending on individual needs and interests. Medications are prescribed when appropriate.

Any individual may be admitted who, in the opinion of the medical staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible family member.

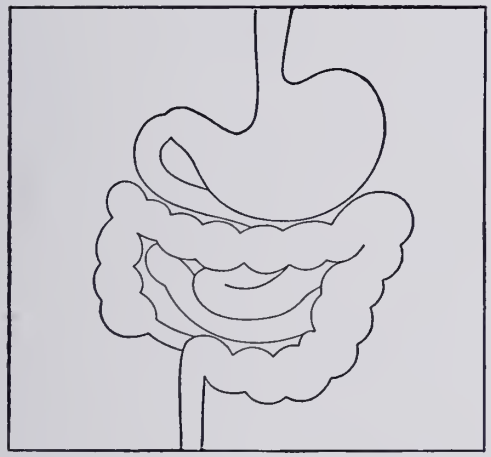
Accredited by the Joint Commission on Accreditation of Hospitals.

Leonard T. Maholick, M. D.
Medical Director

Maj. Gen. (ret.) Howard Snyder
Administrator

THE BRADLEY CENTER, INC.
2000 Sixteenth Avenue
Columbus, Georgia 31901
Area Code 404 324-4882

in "Gasspastic" conditions



The GI tract in spasm is commonly a "gas trap."

Sidonna® is formulated to release entrapped gas, as well as to provide antispasmodic/sedative effects.

In addition to the traditional combination of belladonna alkaloids and butabarbital (warning: may be habit forming.), Sidonna contains simethicone—a non-systemic defoaming agent that "lyses" gas bubbles on contact.

Sidonna has the ability to relieve GI spasm, pain **and gas** in the irritable bowel syndrome, spastic colon, pylorospasm, gastroenteritis, gastritis, nausea, nervous indigestion, or gastric and duodenal ulcer.

Sidonna can calm GI spasm...control anxiety...and release entrapped GI gas from the system.

Sidonna can do more for your "gasspastic" patient. Try him on 1 or 2 tablets before meals and at bedtime.

Sidonna®

Each scored tablet contains: Specially activated simethicone 25 mg.; hyoscyamine sulfate 0.1037 mg., atropine sulfate 0.0194 mg., hyoscine hydrobromide 0.0065 mg. (equivalent to belladonna alkaloids [as bases] 0.1049 mg.) and butabarbital sodium N.F. 16 mg. (Warning: May be habit forming.)

can do more

Contraindications: Anticholinergics should not be used in patients with glaucoma, known prostatic hypertrophy, or pyloric obstruction. Urinary retention may indicate the presence of prostatic hypertrophy. If it occurs, the dose should be reduced or the drug withdrawn. Also contraindicated in patients with known hypersensitivity to one of the components.
Side Effects: Dryness of the mouth, blurred vision, dysuria, skin rash, constipation or drowsiness may occur.

Reed & Carnrick/ Kenilworth, New Jersey 07033

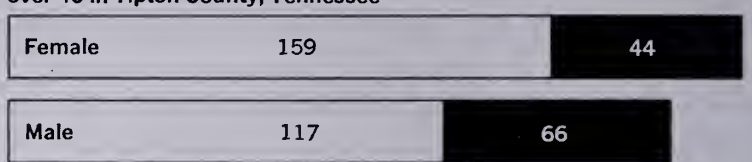
What it means to live and work in Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



Solar, actinic, senile keratoses

Called by many names, the typical lesion is flat or slightly elevated, brownish or reddish in color, papular, dry, adherent, rough, sharply defined; usually multiple lesions, chiefly on exposed portions of the skin.

Sequence/selectivity of response

Erythema in areas of lesions may begin after several days of therapy; height of reaction (only in affected areas)* usually occurs within two weeks, declining after discontinuation of therapy. Since this response is so predictable, lesions that do not respond should be biopsied to rule out the presence of a frank neoplasm.

Cosmetic results

Cosmetic results are highly favorable. Incidence of scarring is low—important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.

5% cream–a Roche exclusive

Only Roche formulates the 5% cream... high in patient acceptability... high in clinical efficacy, especially for lesions of hands and forearms... economical.

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Multiple actinic or solar keratoses.
Contraindications: Patients with known hypersensitivity to any of its components.
Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.
Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.
Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.
Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.
How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.
Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

an alternative to conventional therapy

Efudex®

(fluorouracil)

cream/solution

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110



(Continued from Page 817)

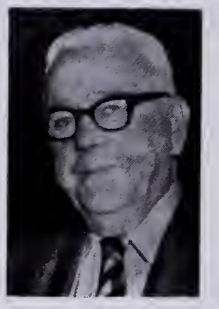
PROGRAM

Opening Session

Thursday, April 20, 1972

Civic Room

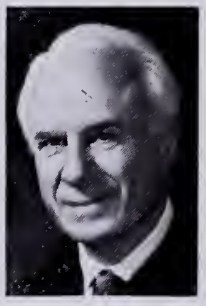
Jefferson Davis Hotel



Archie E. Thomas, M. D., Montgomery, President, Presiding

9:00 A. M.

Call to order



Invocation

Dr. Robert Strong, Trinity Presbyterian Church, Montgomery

9:05 A. M.



Welcome Address

Honorable James Robinson, Mayor, City of Montgomery

9:10 A. M.



Welcome Address

E. F. Campbell, M. D., President, Medical Society of Montgomery County

Orientation



Civic Room

Frank M. Phillippi, M. D., Brewton, President-Elect, Presiding



9:15-9:20 A. M.

Medical Organization

Mr. L. P. Patterson



9:20-9:30 A. M.

Medicine and Religion

A. A. Stamler, M. D.



9:30-9:50 A. M.

Regional Medical Program

John M. Packard, M. D.

(Continued on Page 825)

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug, in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmias, palpitation, and increased blood pressure. One published report described T wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include components such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab, 1 tablet [illegible] mg. tablet daily, swallowed whole, in midmorning (10 a.m.). TEPANIL [illegible] mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

1 3325 (2876)

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Painful night leg cramps...



unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

- □ Prevents painful night leg cramps
- □ Permits restful sleep
- □ Provides simple convenient dosage — usually just one tablet at bedtime

Prescribing Information — Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriasclerosis and static foot deformities. **Contraindications:** Quinamm is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

Merrell

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Cincinnati, Ohio 45215

I-3508(3050)

Trademark: Quinamm

Quinamm

(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps.

(Continued from Page 822)



9:50-10:00 A. M.

Continuing Education: Responsibilities and Direction

Margaret S. Klapper, M. D.

10:00-10:20 A. M.

COFFEE BREAK—VIEW EXHIBITS



10:20-10:40 A. M.

Medical Ethics

H. H. Hutchinson, M. D.



10:40-11:00 A. M.

Organized Medicine

Grover C. Murchison, M. D.



11:00-11:30 A. M.

PRESIDENT'S MESSAGE

Archie E. Thomas, M. D., Montgomery

Auxiliary Luncheon

Thursday, April 20, 1972

Whitley Hotel



12:15 P. M.

Mrs. Gilder L. Wideman, Birmingham, President, Presiding



Invocation

Mrs. Ira L. Myers, Montgomery

Introduction of Guests

Presentation of AMA-ERF Contribution



by Mrs. Howard C. Johnson, Sheffield, AMA-ERF Chairman



Speaker

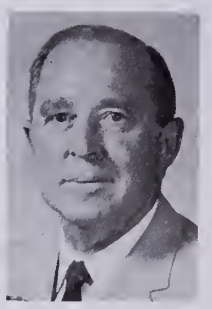
Mr. Winton Blount, Former Postmaster General

First Scientific Session

Thursday, April 20, 1972

Civic Room

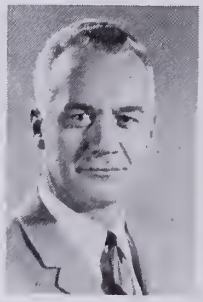
Jefferson Davis Hotel



E. L. McCafferty, Jr., M. D., Mobile, Past President, Presiding

2:00-2:30 P. M.

The Management of Adenocarcinoma of the Endometrium With Progestins



David G. Anderson, M. D., Associate Professor, Department of Obstetrics and Gynecology, University of Michigan Medical Center, Ann Arbor, Michigan

2:30-2:40 P. M.

DISCUSSION



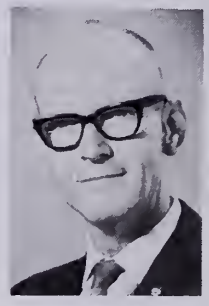
Robert V. Barnett, M. D., Birmingham



Edwin G. Waldrop, M. D., Birmingham

2:40-3:10 P. M.

Recent Advances In Thyroid Eye Disease



J. Lawton Smith, M. D., Professor of Ophthalmology, University of Miami School of Medicine, Miami, Florida

3:10-3:20 P. M.

DISCUSSION



Oscar Dahlene, Jr., M. D., Birmingham



Henry W. Faulkner, M. D., Mobile

3:20-3:50 P. M.

Surgery of the Cardiac End of the Stomach



John Butler Blalock, M. D., Ochsner Clinic, New Orleans, Louisiana

3:50-4:00 P. M.

DISCUSSION



Henry L. Laws, II, M. D., Anniston



George E. Hallenbeck, M. D., Birmingham

4:00-4:20 P. M.

COFFEE BREAK—VIEW EXHIBITS

4:20-4:50 P. M.

Medical Society And University Cooperation For The College In Mobile



Robert M. Bucher, M. D., Dean, University of South Alabama, Mobile

4:50-5:20 P. M.

Cryogenic Hypophysectomy in the Management of Metastatic Breast Cancer—Experience in 90 Cases



Patterson S. Reaves, M. D., Division of Neurosurgery, Department of Surgery, University of Alabama School of Medicine, Birmingham

5:20-5:30 P. M.

DISCUSSION



J. Garber Galbraith, M. D., Birmingham



Donn J. Brascho, M. D., Birmingham

RIVER BOAT PARTY

Ballroom, Jefferson Davis Hotel

Ministrel Show, Music by "The Corporations" —Danceable Music, Group Singing—All the old Riverboat favorites.

6:00 P. M., Cocktails—7:30 P. M., Buffet

Second Scientific Session

Friday, April 21, 1972

Civic Room



C. Kermit Pitt, M. D., Decatur, Past President, Presiding

9:00-9:30 A. M.

The Nose—Form Determines Function



Bruce F. Holding, Jr., M. D., Montgomery

9:30-9:40 A. M.

DISCUSSION



John S. Taylor, M. D., Mobile



Hugh M. Reeves, M. D., Selma

9:40-10:10 A. M.

Surgical Complications of Diverticula of the Colon



James G. Donald, M. D., Mobile

10:10-10:20 A. M.

DISCUSSION



Arthur I. Chenoweth, M. D., Birmingham



Fred W. Smith, M. D., Huntsville

10:20-10:40 A. M.

COFFEE BREAK—VIEW EXHIBITS

10:40-11:30 A. M.

Jerome Cochran Lecture

Recent Advances In Heart Surgery



John W. Kirklin, M. D., Professor and Chairman, Department of Surgery, University of Alabama School of Medicine, Birmingham

1:30 A. M.

Caucus of Counsellors and Delegates

ALAPAC Luncheon

Friday, April 21, 1972

Ballroom

12:30 P. M.



Grover C. Murchison, Jr., M. D., Montgomery, Chairman, ALAPAC, Presiding



Invocation

The Rev. Mark E. Waldo, Rector, Episcopal Church of the Ascension, Montgomery

Introduction by Dr. Murchison of ALAPAC Board of Directors and other notables at speakers' tables and VIP tables.

Presentation by Dr. John M. Chenault, Chairman, State Board of Censors, of Plaques of Appreciation to State Senator James S. Clark, Eufaula, and State Representative David E. Cauthen, Decatur.



(Continued on Page 832)

"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

Should nongovernment scientists and physicians play a role in drug regulation?

Opinion

Results of a questionnaire to 7000 physicians:

82.8%
Physicians should play a role

78.3%
Independent scientists should play a role

69.8%
Medical academicians should play a role

Opinion & Dialogue

Dialog

Should nongovernment scientists and physicians play a role in drug regulation?

Doctor of Medicine

Herbert L. Ley, Jr., M.D., M.P.H., Formerly Commissioner, F.D.A. (1968-1969) Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Administration.

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academic-based scientists could make it their business to comment on proposed regulations appearing in the Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone unheard. The FDA is caught among pressures from industry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations,



state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regulations.

One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combinations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practitioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete information. If not, much of wh the medical communi *and* federal regulators will often be represented simplistic and somewh misleading terms.

One illustration of t misuse of the media in th regard is the recall of an coagulant drugs sever years ago. This FDA acti was given publicity by t press and television th went far beyond its pro able importance. The resu was a very uncomfortab situation for the pract tioner who had patien taking these medicatior Since the practitioner a pharmacist had not bee informed of the action l the time it was publicize in most states they we deluged with calls fro worried patients.

The practitioner can a tempt to solve these pro lems of inadequate comm nication in several way One would be the creati of a communications li in state pharmacy societi When drug regulation nev is to be announced, the s ciety could immediate distribute a message to e ery pharmacist in the stat The pharmacist, in tur could notify the physicia in his local community that he and the physicia could be prepared to a swer inquiries from p tients. Another approac would be to use profe sional publications t practitioner receives.

All of this leads back my opening contention: drug regulation is to be e fective, timely, and relat to the realities of clinic practice, a better method communication and fee back must be developed b tween the nongovernme tal medical and scientif communities and the reg latory agency.

ue

Maker of Medicine



Henry W. Gadsden, Chairman & Chief Executive Officer, Merck & Co., Inc.

In my opinion, it is the responsibility of all physicians and medical scientists to take whatever steps they think are desirable in a law- and regulation-making process that can have far-reaching impact on the practice of medicine. Yet many events in the recent past indicate that this is not happening. For example, it is apparent from drug efficacy studies that the NAS/NRC panels gave little consideration to the evidence that could have been provided by practicing physicians.

There are several current developments that should increase the concern of practicing physicians about drug regulatory affairs. One is the proliferation of malpractice claims and litigation. Another is the effort by government to establish the relative efficacy of drugs. This implies that if a physician prescribes a drug other than the "established" drug of choice, he may be accused of practicing something less than first-class medicine. It would come perilously close to federal direction of how medicine should be practiced.

In order to minimize this kind of arbitrary federal action, a way must be found to give practitioners both voice and representation in government affairs. Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making processes. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in *proving* precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis, and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted *prima facie* as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings—where everyone with an interest and a capacity to contribute has an opportunity to be heard . . . and, if that opportunity is not spontaneously afforded him, he may seek it.

Opinion & Dialogue

What is your opinion, doctor?
We would welcome your comments.

P·M·A

The Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

(Continued from Page 828)

Introduction of Speaker

Dr. A. E. Thomas, President, MASA



Speaker: State Senator Roland Cooper, Camden, recipient of last year's ALA-PAC Plaque of Appreciation.

Adjourn

Third Scientific Session

Friday, April 21, 1972

Civic Room



J. O. Finney, M. D., Birmingham, Past President, Presiding

2:00-2:30 P. M.

Diagnosis of Diabetes



Buris R. Boshell, M. D., Director of the Division of Diabetes, Endocrinology and Related Disorders, Department of Medicine, University of Alabama, Birmingham

2:30-2:40 P. M.

DISCUSSION



James C. Barrett, M. D., Mobile

P. Caldwell DeBardeleben, M. D., Selma

2:40-3:10 P. M.

The Integration of Medical and Social Responsibilities In Teaching Health Professionals



H. A. Thiede, M. D., Professor and Chairman in Obstetrics and Gynecology, University of Mississippi School of Medicine, Jackson, Mississippi

3:10-3:20 P. M.

DISCUSSION



Charles E. Flowers, Jr., M. D., Birmingham

B. F. Dorrough, M. D., Montgomery

3:20-3:40 P. M.

COFFEE BREAK—VIEW EXHIBITS

(Continued on Page 836)

if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

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When irritable colon feels like this

...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ **belladonna alkaloids—for the hyperactive bowel**
- ☐ **simethicone—for accompanying distension and pain due to gas**
- ☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

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(from the Greek **kinetikos,**
to move,
and the Latin **sedatus,**
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

(Continued from Page 832)

3:40-4:10 P. M.

The Radiologic Assessment of Trauma in the Urinary Tract



David M. Witten, M. D.,
Birmingham

4:10-4:20 P. M.

DISCUSSION



Guy A. Montgomery, M. D.,
Opelika



Samuel W. Windham, M. D.,
Dothan

4:20-4:50 P. M.

Total Hip Replacement



Chestley L. Yelton, M. D.,
Chairman and Director,
Division of Orthopaedic
Surgery, University of
Alabama School of Medi-
cine, Birmingham

4:50-5:00 P. M.

DISCUSSION

David G. Veseley, M. D.,
Birmingham



Kenneth M. Hannon, M. D.,
Mobile

Friday, April 21, 1972

6:00 P. M.

Reception

7:00 P. M.

Awards Dinner

Ballroom, Jefferson Davis Hotel



E. W. Stevenson, M. D.,
Presiding



Invocation

Rev. William P. Brock,
Chaplain, Baptist Hospital,
Montgomery

Awards Presentation



Harry J. Till, M. D., Presiding

William Crawford Gorgas Award



Mr. Joe Bruno, Birmingham

Douglas L. Cannon Medical Reporter Award



Mr. Harold Martin, Montgomery

S. Buford Word Award



William J. Pitts, M. D., Birmingham

Introduction of Distinguished Guests and Fraternal Delegates

Archie E. Thomas, M. D., President
Medical Association of the State of Alabama

Presentation of Fifty Year Club Members

Robert Mitchell Brannon, M. D.

Sidney Wixforth Collier, M. D.

Harry Reed Farmer, M. D.

Herbert Foster Gaines, M. D.

Tinsley Randolph Harrison, M. D.

Henry Floyd Martin, M. D.

Harry Sam Rowe, M. D.

Richard Olney Russell, Sr., M. D.

Harold Ewart Simon, M. D.

Samuel Patrick Wainwright, M. D.

James Ezekiel Whitaker, M. D.

Introduction of Past Presidents



Speaker: Wesley W. Hall, M. D., Reno, Nevada, President, American Medical Association

ADJOURN

(The Association gratefully acknowledges the financial contributions made by Merck Sharp and Dohme, A. H. Robins Company, and Geigy Pharmaceuticals.)

Receptions preceding the Riverboat Party and the Awards Dinner are compliments of the following:

Durr-Fillauer Medical in Montgomery

Durr-Fillauer Medical in Birmingham

Durr-Fillauer Medical in Mobile

Durr-Fillauer Medical in Huntsville

Gentec Hospital Supply Company, Birmingham

Bedsole Surgical Supply, Mobile.

Annual Business Session

Saturday, April 22, 1972

Ballroom

Jefferson Davis Hotel

Archie E. Thomas, M. D., Montgomery, President, Presiding

9:00 A. M.

Presentation by the Woman's Auxiliary to the Medical Association of the State of Alabama

1. Report of the Board of Censors
2. Revision of the Rolls
   a. County Societies
   b. Counsellors
   c. Correspondents
3. Election and Installation of Officers
4. Presentation of Past President's Plaque

ADJOURNMENT

Sterling Drug Inc. Statement On pHisoHex

The proposal of the Food and Drug Administration to place pHisoHex on a prescription basis is, we believe, both premature and illogical. We do not think that the action can be justified on grounds of either safety or science. Further, the action anticipates a study to be carried out by FDA's own panel of experts, and appears to us to be an instance of prejudgment.

The FDA has based its decision on inconclusive and incomplete animal studies, the results of which we believe cannot be automatically translated to human experience.

Against these small and inconclusive experiments, there stands the unparalleled record of safety and effectiveness of pHisoHex in human use over the past 22 years. Since its introduction in 1949, pHisoHex has been used hundreds of millions of times by members of the health profession and by consumers. In all this massive experience, there has not been a single reported case of neurotoxicity due to pHisoHex when used as directed.

More specifically, in carefully controlled studies—published in the scientific literature and covering more than 102,000 infants in 72 hospital nurseries—there were only 11 reported instances of side effects, all of which were skin irritations.

Prior to the introduction of pHisoHex and similar products into routine hospital usage there were thousands of cases of staphylococcal infections each year among babies in nurseries and among hospital nurses. Many of these infections resulted in death. Over the years, the use of pHisoHex and similar products, coupled with careful procedures, reduced the incidence of severe staphylococcal outbreaks literally to zero.

Significantly, we have been informed that epidemics of staphylococcal infections have broken out in the nurseries of four hospitals which discontinued the use of pHisoHex subsequent to issuance of the FDA Bulletin on Hexachlorophene, dated December 9, 1971. The inference to be drawn is obvious.

The FDA action, in our opinion, appears illogical. The safety of pHisoHex will not be increased by requiring a prescription for its purchase. All that will be accomplished is to lessen its proper use and increase the possibility of serious infection.

What effect will the FDA action have on doctors and the public?

First, by requiring consumers to obtain a prescription to buy pHisoHex, the FDA is placing an additional burden on the nation's overworked physicians.

Early Infant Care

Suggestions To Parents

C. Kermit Pitt, M. D., F. A. A. P.
Decatur, Alabama

The purpose of this paper is to make the care of your new baby simple and pleasant. The prospect of being responsible for the welfare of a new infant, particularly if it is the mother's first, fills her with a considerable amount of anxiety and apprehension. Until she is well into the routine she tends to consider the task much greater than it actually is. In the beginning details which later become second nature weigh heavily upon her mind. This being the case, I have found it wise to complement my verbal instructions with a copy of written ones.

Motherhood is the pinnacle of womanhood. There is no greater achievement. The second great challenge is to provide an ideal home for the new baby where he may grow and develop properly. This is a task to be looked upon with eagerness and joy. It is hoped that the suggestions in this paper will make a contribution toward that end.

Environment

Although it is permissible in the beginning for the baby to share the mother's bedroom, after the first few weeks he should have a room of his own where he will be less disturbed and sleep better. Under the age of four months he will be quite easily startled by sudden loud noises and also by being moved quickly or in a jerky manner. The mattress on which he sleeps should be firm and fit the crib or bassinet well. He should be allowed to sleep on his back or on his abdomen as he prefers. It is important that the temperature of his room be kept at a comfortable level. Particularly, it should not be unduly warm. The ideal room temperature for a full-term infant in winter is 71° to 73°. Comfortable, air-conditioned, summer temperature is 72° to 76°. At this environmental temperature it is quite permissible for the baby to wear an undershirt and nightie. There seems to be no real danger of over-dressing a baby although some discomfort may be caused thereby, but over-heated rooms dry out the respiratory mucus membranes and promote infections.

Babies should be bathed with soap and water, the type of soap for the average baby being unimportant. Particularly, one should avoid the regular use of oily substances such as lotions and baby oils. Normal skin abhors the regular use of these materials and will almost always react after a short time with the development of irritations and rashes. The baby should be bathed with a bath cloth and soap and water from head to toe and special care should be used in cleansing the scalp and face adequately. The bath may be followed by powder if the mother desires. Of course, the baby will not be placed in a bathinet or bathtub until the naval cord is off and well healed. The cord usually comes off between the 5th and 10th day of life, although occasionally it stays on longer. It should be left uncovered until it drops off and ideally should be moved around each day with a wet alcohol sponge and thereby encouraged to separate. After the cord is off a little dried blood will be apparent each morning and is neatly removed with an alcohol sponge.

Frequently, and normally, the newborn's breasts enlarge and should cause no concern. Under no circumstances should anyone be allowed to apply heat, ice or massage. If not molested they almost invariably reduce

(Continued on Page 842)

Arthur los



A single-dose, non-staining anthelmi

his pinworms...



with just one non-staining dose of Antiminth (pyrantel pamoate) Oral Suspension.

Highly effective. Active against pinworm...and roundworm.

Non-staining. Doesn't stain teeth or oral mucosa on ingestion. Doesn't stain stools, clothing or linen.

Simple dosage. Single-dose regimen: 1 cc. per 10 lbs. of body weight (1 tsp. per 50 lbs.).

Well-tolerated. Based on pre-introductory studies.

Pleasant-tasting. Easy-to-take, caramel-flavored oral suspension.

Economical. One prescription for the entire family.

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia

Skin reactions: rashes.

Dosage and Administration. *Children and Adults* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.), maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles.

gent: **new ANTIMINTH®**

(pyrantel pamoate)

equivalent to 50 mg. pyrantel base

ORAL SUSPENSION

ROERIG Pfizer

A division of Pfizer Pharmaceuticals
New York, New York 10017

(Continued from Page 839)

themselves in a short time. Interference can lead to abscess formation. The breast enlargement, along with minimal amount of vaginal bleeding which sometimes occurs in the newborn is a manifestation of hormones which the baby has absorbed from the mother's blood stream. Neither should cause concern.

Because tear ducts do not function completely in most babies for weeks or months and because of the silver preparation which is used at birth, there often is some mild irritation and secretion from the eyes. This is rarely a matter for concern and usually is easily cared for by cleansing daily with cotton saturated with water and by occasional gentle massage of the ducts.

The baby's buttocks, genitalia and rectum should be bathed in soap and water as is the rest of his body. The use of tight plastic or rubber diaper covering is to be avoided except when it is necessary to protect the attendants, as when the baby is taken outside the house for visits or otherwise. Absorbent but non-air-tight materials may be used over the diaper at will. Careful cleanliness and the avoidance of air-tight panties will prevent most so called "diaper rashes."

No effort should be made to cleanse the inside of the mouth or deeply inside the ears or nose.

Feeding

Except for very unusual instances breast milk is ideal feeding for a newborn. Breast feeding benefits both infant and mother and it has almost no disadvantages. Most mothers can feed by breast if they have a genuine interest and desire to do so. Some mothers have an aversion to it and others are unable because of illness, work situations, etc. Because most mothers already have their minds made up on this point before meeting the pediatrician, and because artificial feeding is so excellent today, I never make any great attempt to influence one to feed or not to feed by breast.

(Continued on Page 847)

Pre-Sate®
(chlorphentermine HCl)
CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommendad.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportiva and often includes sedation with a barbiturate. If hypertension is marked, tha use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sata (chlorphentarmine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine basa; bottles of 100 and 1000 tablets.
Full information availabla on requast.

WARNER-CHILCOTT
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

for the practical generation

Pre-Sate®

(chlorphentermine HCl)

the trend is toward our kind of anorectic



Not a controlled drug under the Comprehensive Drug Abuse Prevention and Control Act

- low potential for abuse
- less CNS stimulation than with d-amphetamine or phenmetrazine

Effective anorectic adjunct to your program of caloric restriction and diet re-education

- weight loss comparable to d-amphetamine and phenmetrazine, superior to placebo
- convenient one-a-day dosage

PR-GP-21-B/W

Pre-Sate® (chlorphentermine HCl)...the increasingly practical appetite suppressant



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 ml*—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

MED B-6-S (KZL-7) JA71-1631

The Upjohn Company
Kalamazoo, Michigan 49001

Upjohn

(Continued from Page 842)

When breast feeding is elected one breast should be used for each feeding. I have never detected any advantage to using both at the same feeding. When both are employed there is a tendency for the first to be incompletely emptied and, done habitually, this discourages milk production. Also when both breasts are used at one time there is likely to be an inadequate supply at the next feeding.

The mother who breast feeds may eat whatever she wishes so long as it does not disagree with her. Practically, there is no exception to this rule. She may eat well since while feeding two people she is not likely to gain weight. Her diet should be a good one including a vitamin supplement in winter and including either more than a pint of milk or a calcium supplement. In addition to the usual daily bath the breasts should be cleansed with water before and after nursing.

Care should be taken that the nipples are well dried following nursing, lest they chafe and become sore. The feeding schedule should be a relaxed one. In general the baby should be allowed to nurse whenever he desires provided the interval is three hours or longer. On occasions, when he goes several hours between feedings, he may require two at a shorter interval.

Most babies for the first few weeks nurse about each three hours in the daytime and usually at longer intervals at night. The baby needs to be waked for a feeding only at the mother's convenience. Particularly, he should be waked and fed at the mother's bedtime so that she will not need to feed more than one time between then and morning. Fed at 9 or 10 p. m., the baby should not require another feeding before morning after he is three months old.

Many babies omit the 2 or 3 a. m. feeding by the time they are a month old or even before. With increasing age the baby voluntarily increases the length of his feeding intervals so that by six to eight months he is apt to be on three meals a day with an extra milk feeding or two. It is well for the mother to know that the baby receives milk rapidly from the breast, approximately 90% of the full feeding in five minutes and the remainder in another five, so that it is unnecessary for a breast baby to nurse for longer than 10 to 15 minutes. If the milk supply is adequate the baby usually nurses five to 15 minutes, is satisfied and happy.

Beginning at about four or five days of age the breast baby usually has several loose, possibly green, stools each day. By the time he is two or three weeks old he tends to have a stool after each feeding, or possibly more often so that the total may be a dozen or more in 24 hours. These stools usually do not cause any discomfort, are a sign of abundance of milk, and need cause no anxiety.

It is permissible to use cotton and oil or lotion to cleanse the buttocks after each of these numerous breast milk stools provided the daily soap and water bath is also employed. The average breast baby gains some two pounds over his birth weight by the time he is a month old.

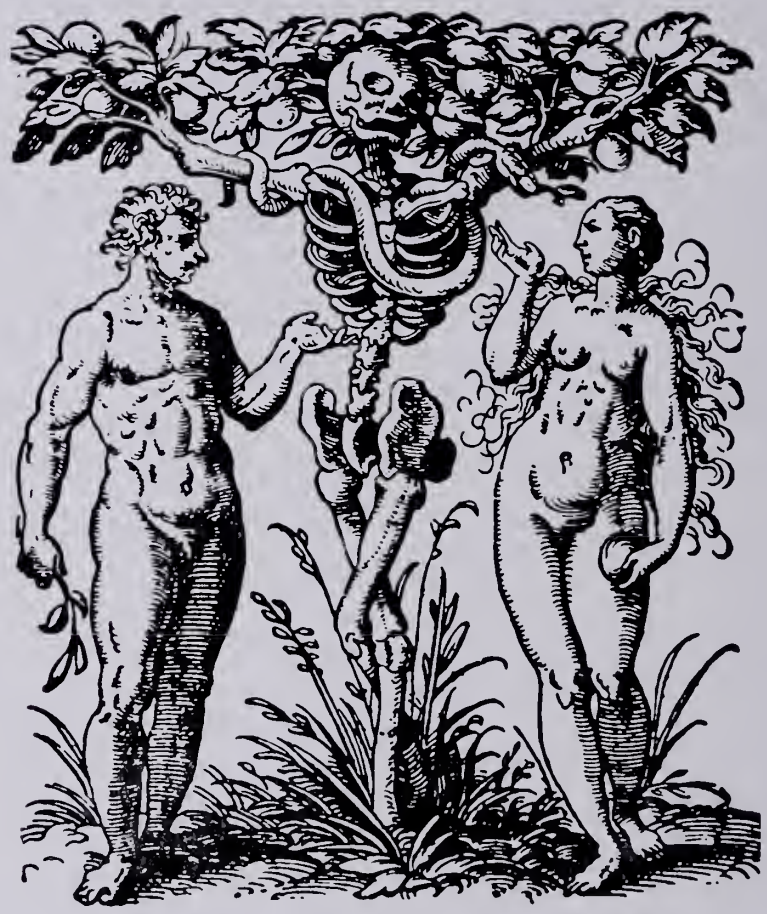
It is well for the mother to realize that for the first three or four days following the baby's birth the breasts contain little or no milk so that if the baby is indifferent to nursing it should cause her no great concern and if he nurses with vigor his actual nursing time during these days should perhaps be limited to some five minutes so that he will not unnecessarily traumatize the nipple.

Babies fed on formulae usually do quite well and in our modern day the number and variety are gratifying. Bottle feeding is usually easy and pleasant and the bottle fed baby grows and is happy. After consideration of the baby's needs the formula will be chosen which hopefully will be ideal for him. Regardless of the one chosen, there are four things that are important in bottle feeding. There are *only four*. If these conditions are

(Continued on Page 850)

In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrheo may mask o delay the symptoms of incubating syphilis. Patients should b carefully examined and monthly serologicol follow-up for c least 3 months should be instituted if the diagnosis of syphilis i suspected.

Safety for use in infants, children and pregnant women hos no been established.

Precautions: The usuol precautions should be observed witl atopic individuals. Clinical effectiveness should be monitored t detect evidence of development of resistance of *N. gonorrhoeae*

Adverse reactions: The following reactions were observe during the single-dose clinical triols: soreness at the injection site urticaria, dizziness, nausea, chills, fever ond insomnio.

During multiple-dose subchronic tolerance studies in normo humon volunteers, the following were noted: a decrease in hemo

Trobicin®

sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

High cure rate:* 96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

*Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included.

globin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.
Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.
For additional product information, see your Upjohn representative or consult the package insert. MED B I S (LWB)

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

(Continued from Page 847)

met the baby will grow and be happy. If one of the four is neglected the baby will not do well. They are:

1. The baby should be fed whenever he wishes provided it is not more often than three hours. He must not be fed regularly at shorter intervals.

2. Adequate holes in the rubber nipples should be made so that the baby may feed easily and quickly. The breast baby gets essentially all the milk he is going to receive in ten minutes, the bottle baby should be allowed to do the same. To date a rubber nipple which will deliver milk in this manner has not been made, so that it is necessary to make larger holes with a red-hot instrument such as a safety pin. One to three holes should be burned in the nipple so that when the bottle is inverted milk pours freely. These holes can be made so large as to be a nuisance but it is better to make them too large than too small.

3. The baby should be allowed to have all the milk he wishes at each feeding. The breast fed baby whose mother has an adequate supply of milk is not limited as to the intake. The bottle baby should be treated in the same manner. There is no danger in overfeeding. If the baby takes an ounce or so more than he needs he promptly burps it up.

4. Unlike the breast baby the bottle baby is not comfortable or happy if he has more than four stools in 24 hours. He may have one to four each day or even one every two days if it is not too firm for comfort. The bottle fed baby who has six to eight stools a day invariably cries until he is relieved by proper feeding. Choosing a formula which will regulate the stools is the responsibility of the pediatrician.

TO REPEAT, THE FORMULA FED BABY ALLOWED TO EAT AT WILL (PROVIDED THE INTERVAL IS THREE HOURS OR LONGER) THROUGH NIPPLES WHICH DELIVER MILK ADEQUATELY, GIVEN ALL HE DESIRES EACH FEEDING, AND WHOSE STOOLS ARE NORMAL, WILL GROW AND BE HAPPY.

Ideal formula preparation for the infant under four months entails sterilization of water, nipples and bottles. The simplest and best technique is the so-called terminal method. Water and milk can be mixed in an unsterile container, divided into the 24 hour supply of bottles (usually seven), nipples applied and everything sterilized at the same time.

Breast milk is not cold and ideally the young infant is not fed cold formula.

Sterile water may be offered between milk feedings. If the baby is awake and fussy and it is an hour or so until time to offer milk, water can be given. If the baby does not desire it, he does not need it, so that one need not be concerned if he refuses it.

A vitamin prescription will be given with instructions on the bottle. The liquid should be dropped directly into the baby's mouth once daily, possibly at bath time. There should be no concern if a portion of the vitamins is not retained. The baby will quickly learn to enjoy them and will retain an adequate amount.

Instructions about orange juice and cereal will be given at the baby's first monthly visit.

At birth certain nerve tracts are undeveloped and the rectal sphincter is often tight so that it is not uncommon for the newborn to have a stool which is soft enough but not passed without some extra stimulation. This baby may need a glycerin suppository inserted after the same feeding each day for a short time to help with evacuation. Such suppository use is not habit forming, is harmless and may be used indefinitely with impunity.

Many parents of new babies fear colic. It should be emphasized that colic is abdominal cramping which always has a cause that should be corrected. Almost always this

cause is either improper feeding technique (too short a feeding interval, feeding through nipples with inadequate holes, giving an inadequate amount of milk) or, in the formula fed baby more than four stools in 24 hours. If these conditions are corrected he should have no pain. The breast fed baby whose milk supply is adequate and who is fed at a reasonable interval (three hours or longer) should not have colic. If the above conditions are met and if the baby is crying excessively the pediatrician should be consulted.

Emotional Needs of the Baby

Babies require love and affection as much as, even more than, they do food. Young parents need have no fear of holding, cuddling and rocking, or any other action which lets the baby know that he is wanted, loved and appreciated. This kind of care will not make the baby "spoiled" but will make him happy and responsive. They should feel free to do as they wish in these matters.

Parents have a right to expect the baby not to cry enough to be a problem. He will cry a minimal amount. I stress this normal crying for a purpose. The average newborn cries 15 to 20 minutes six or eight times in 24 hours for a total of two hours. This activity has been clocked in nurseries many times. It is essential. At birth the infant's lungs are collapsed, begin to expand with the baby's first cry and rapidly expand thereafter if his cry is vigorous. Other than crying, the baby literally does nothing to make himself take more than a shallow breath until he is several months old. When he cries he also exercises his muscles in general. Parents need not feel guilty about allowing the baby to cry 15 to 20 minutes at a time. He may cry this amount no matter what they do and I stress this fact in urging parents to allow babies to go to sleep without aid. The baby should be placed in the bed, awake or asleep, however he happens to be, and left undisturbed for 15 to 20 minutes each time, whether he cries or not. If, treated in this manner, the baby cries enough to disturb his folks, there is something wrong that ought to be corrected. He will not do so unless something is wrong. Conversely, unless he is handled in this fashion there will invariably be a problem of crying.

The normal infant as he approaches one month of age enjoys more socializing than he has demanded prior to that time. He is prone to be awake and somewhat more fussy in the late afternoon and early evening (often 3 to 9 p. m.). If the mother is not busy with other duties he will appreciate more attention from her. If she is otherwise occupied she may safely ignore his intermittent crying during these periods which usually terminate after three months of age.

If babies are adequately fed, abundantly loved and taught to go to sleep without assistance, they grow, are happy and are a source of pride to their parents and of envy to their parent's friends.

Babies like other people vary in their degree of nervous tension and are affected to a considerable degree by the tensions which influence their parents. Fortunately they are prone to turn out well in spite of us. A calm, disciplined home where love abounds offers children optimum possibility for ideal growth and development.

Summary and Conclusions

The care of a young infant should be one of life's delightful and gratifying experiences and in this paper the more significant points made toward that end are: For the formula-fed baby insure that nipple holes are large enough so that he may easily and quickly take all the formula he desires; give him all he desires whenever he wishes provided the intervals between feedings are usually at least three hours in length; do not be pleased with a formula which causes more than four stools in 24 hours—the baby won't be; provide a cool environment; bathe with soap and water; avoid lotions and oils; engulf him with love and make a reasonable effort to allow him to learn to go to sleep without assistance.



These are Candeptin:

The highly effective candicidin for all your vaginal moniliasis patients.

First came CANDEPTIN (candicidin) Tablets for intravaginal use. Then CANDEPTIN Ointment to treat labial involvement and for intravaginal use. Now unique **CANDEPTIN VAGELETTES**—candicidin ointment in soft gelatin capsules—extend the range of CANDEPTIN therapy to even your pregnant and virginal patients (you merely cut off the narrow tip and extrude the contents through the intact hymen).

Clinical proof of potency

CANDEPTIN brings your patients prompt relief of itching, burning and discharge—usually within 72 hours.[1] A single, 14-day course of treatment is usually all that's needed for a complete cure.[2,3,4]

Significantly more potent *in vitro* than nystatin.[5] CANDEPTIN Tablets and Ointment have shown clinical cure rates of 90% and higher in both pregnant and non-pregnant patients.[1,4,6] And in recent studies of **CANDEPTIN VAGELETTES** Vaginal Capsules involving both pregnant and non-pregnant patients, a 100% culture-confirmed cure rate was achieved with a single 14-day course of therapy.[2,3]

Only CANDEPTIN gives you a dosage form for every therapeutic need, plus *eight years' clinical proof* of potency. Consider CANDEPTIN for your next vaginal moniliasis patient.

CANDEPTIN®
(candicidin)

Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)

Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: 1. Olsen, J. R. Journal-Lancet *85*: 287 (July) 1965. 2. Giorlando, S. W. Ob/Gyn Dig. *13*: 32 (Sept.) 1971. 3. Decker, A. Case Reports on File, Medical Department, Julius Schmid. 4. Giorlando, S. W., Torres, J. F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*: 370 (Oct. 1) 1964. 5. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. 6. Friedel, H. J. Maryland M. J., *15*: 36 (Feb.) 1966.

Julius Schmid Pharmaceuticals
423 West 55th Street
New York, New York 10019

CANDEPTIN®
(candicidin)
Vaginal Tablets
Vaginal Ointment
and VAGELETTES™
Vaginal Capsules

Deaths

BRUCE, Byron Sanford, M. D.—Dr. Bruce, 86, native Texan and a practicing physician in Opelika for more than half a century, died 8 February 1972. Graveside services were held next day in the Opelika Cemetery. Survivors include his widow, the former Aileen Frederick; a daughter, three sons, one of whom is also an M. D., Dr. James Frederick Bruce, Opelika; fourteen grandchildren, a brother and a sister . . . Dr. Bruce was graduated in Pharmacy in 1902 from the University of Texas, which he reentered five years later in pursuit of a medical degree, graduating a second time in 1911. In 1916, when war came to the Mexican border, Dr. Bruce entered the Medical Corps as a lieutenant. When the war was over, he held the rank of colonel and was head surgeon at a military hospital in Texas. Moving to Opelika, Alabama, in 1920 from Texas, he and an uncle (who will be two of five subjects of a Fathers-and-Sons in Medicine article later this year) opened Opelika's first hospital in a building still standing behind the Bruce residence. This hospital served the East Alabama area for nearly 30 years until the Lee County Hospital was built with Hill-Burton funds. Meantime continuing active in the American Legion through his lifetime, for some time before and through World War II he was Selective Service Medical Officer for Lee County.

* * *

CLEMENTS, Ralph Mayo, M. D.—Dr. Clements, 68, of Tuscaloosa, died 24 February 1972. Funeral services were held two days later from the First United Methodist Church, with burial in Tuscaloosa Memorial Park. Survivors include his widow, the former Ima Carl Turner; two sons, Dr. Ralph Clements, Jr., Tuscaloosa dentist, and the Rev. William Morris Clements, clergyman, now a resident of California; a brother, Oscar Clements, retired Air Force officer now living in Texas; and a sister, Mrs. Frances Lamb, Northport. Born in

Birmingham in 1904, Dr. Clements was reared in Northport, was graduated with his M. D. degree from Rush, interned at Charity Hospital, New Orleans, and returned to Tuscaloosa to practice. A Naval officer in World War II, he was attached to the Seabees on duty at the United States Naval base in Trinidad.

* * *

DODSON, James Horace, M. D.—Dr. Dodson, born in Fayette, Alabama, 15 March 1886, at the time of his retirement in 1968 the oldest practicing graduate of the University of Alabama Medical School in Mobile, died Friday, 4 February 1972, after a brief illness. Survivors include his widow, the former Carrie Bolton; a son, Dr. Marion Harwood Dodson, Mobile; three grandchildren; and a sister, Mrs. Velma Reley, Montgomery. Funeral services were held at 11:30 a. m. Monday, 7 February, from the First Baptist Church of Mobile, with burial in Pine Crest Cemetery. Prominent in the civic, social and religious as well as the professional affairs of his city, Dr. Dodson was a past president of the Mobile County Medical Society and the Mobile County Board of Health, a fellow of the American College of Surgeons, a founding fellow of the American College of Colon and Rectal Surgery, his specialty; a deacon in the First Baptist Church and a teacher in its Men's Bible Class; an extensive traveler who had lectured frequently on his travels, especially on the Holy Land.

* * *

HARDY, Walter Baber, M. D.—Dr. Hardy, 84, a native of Dallas County, died in Birmingham on Saturday, 12 February 1972; funeral and burial were held on Monday. Survivors include three sisters, Mrs. John Traylor, Mrs. Robert Rountree and Mrs. Lillian Phillips, all of Selma; and five brothers, Sidney J. Hardy, Alberta, Alabama; Miles Hardy, Jr., Tyler, Alabama; Frank, Gordon and Ralph Clements, all of Selma. Dr. Hardy was a graduate of the public schools of Selma and of Marion Military Institute before going to Tulane for his M. D. degree, received in 1912. After serving through World War I in the Army Medical Corps he attended Harvard University for specialty training in 1921 and had practiced in Birmingham to his retirement 11 years ago. Dr. Hardy was a member of AMA and of MASA, was a Fellow of the American Academy of Ophthalmology and Otolaryngology, and in 1939 served as president of the Jefferson County Medical Society.

* * *

JOHNSON, Frank Wendell, M. D.—Dr. Johnson of Mobile died 24 November 1971, and funeral and burial were held two days later, on his 52nd birthday. Survivors include his widow, the former Doris Cunningham; one married daughter (Linda), Mrs. Ben May of Mobile; and nine smaller children: Michael, the eldest, 15; Patricia, Peggy, Mark, Russell, Lori, Jeannie, Patrick and Mallory. Born in Mobile 26 November 1919, Dr. Johnson earned his M. D. degree in 1948 from the University of Tennessee Medical College, and had been in general practice in Mobile except for his tour of duty in the Navy. He was in the Air Force Reserve. Dr. Johnson had been particularly active in Boy Scout work and at the time of his death was scoutmaster of the troop to which his eldest son belonged. Funeral services were from the Church of St. Ignatius, with burial in the Mobile Catholic Cemetery.

* * *

NORVELL, Lester Rice, M. D.—Dr. Norvell, 52, of Florence, Alabama, president of the Eliza Coffee Memorial Hospital medical staff, collapsed and died while jogging early Tuesday morning, 29 February 1972. Funeral services were held the following day from Trinity Episcopal Church, the Rev. Dr. E. G. Mullen and the Rev. Frank Mathews officiating. Burial was in Green-

(Continued on Page 859)

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for relief of ulcer pain.



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a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®) may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (1583)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

(Continued from Page 854)

view Memorial Park. Surviving besides his widow are a son, Lester Rice Norvell, Jr., of Memphis, Tennessee; two daughters, Miss Camille Maxwell Norvell, New York City; Miss Helen Cochran Norvell, Florence; his mother, Mrs. Helen S. Norvell, Florence; a brother, Dr. Strudwick Norvell, Florence; and a sister, Mrs. Elizabeth N. Schaeffer, Dhahran, Arabia. Born in 1919, in Florence, Dr. Norvell received his M. D. degree from the University of Tennessee Medical College, Memphis, in 1944, and had been in practice in his native Florence for 26 years. He was a member of AMA, of the Medical Association of the State of Alabama, and a Fellow of the American College of Surgeons.

Tips to . . .
Prevent Malpractice Claims

CLEANLINESS:

Make cleanliness a routine technique in hospital, office and home.

LOOSE TALK AND WRITTEN REPORTS:

Make no adverse criticism of care or treatment a patient has received from another person.

Extreme care should be taken in writing reports, records and letters, to refrain from extraneous remarks and personal opinions outside the record.

CONSENT:

Obtain proper consent (written) before you begin any surgical operation, treatment or autopsy.

Surgery should not be performed beyond the consent obtained and authorized as such additional surgery constitutes assault regardless of necessity.

MORALS:

An office assistant or a nurse should be present or within hearing distance while examining a nude or semi-nude patient. Prohibit presence of laymen.

MEDICAL PROGRESS:

Keep abreast of new treatments and techniques; read approved medical publications, take refresher courses; attend scientific meetings, etc.

LABELING:

Be sure that all preparations including blood for transfusion are adequately labeled and preserved.

SPONGE COUNT:

Keep an accurate count of sponges, clamps, retractors, etc. used in any operation in a body cavity. Ray-tec sponges and packs and post operative x-ray recommended.

Study and apply NFPA Pamphlet 56, "Code For The Use of Flammable Anesthetics"—especially Sections 343 and 355—whenever employing flammable anesthetics.

Cooperate with safety procedures and rules set up by Hospital Administrators and Staff.

Make a double check between yourself and assistants of all medications, blood, anatomy, etc. before proceeding with treatments, administration or surgery to be sure the right treatment is being given to the right patient.

When necessary to give verbal orders over the telephone to hospital personnel, check and initial them immediately upon arriving at hospital.

When you prescribed Orinase®

(tolbutamide, Upjohn)

14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures necessar for optimal control with insulin are also necessary with Orinase The patient on Orinase must be fully instructed: about th nature of his disease; how to prevent and detect complications how to control his condition; not to neglect dietary restrictions develop a careless attitude or disregard instructions relative t body weight, exercise, personal hygiene, and avoidance of ir fection; how to recognize and counteract impending hypogly cemia; how and when to test for glycosuria and ketonuria; ho to use insulin; and to report to the physician immediately if h does not feel as well as usual.

Caution, very close observation, and careful adjustment c dose are necessary when: insulin is withdrawn during the tri period in order to avoid ketosis, acidosis, and coma; thiazid diuretics are administered which may result in aggravation c diabetic state and increased tolbutamide requirement, tempc rary loss of control, or even secondary failure; treating patient with impaired hepatic and/or renal function and debilitated, ma nourished, or semistarved patients in order to avoid severe hypc glycemia which may require corrective therapy over severa days; and treating patients with severe trauma, infection, or su gical procedures where temporary return to insulin or additio of insulin may be necessary. Response to tolbutamide is dimir ished in patients receiving therapy with beta blocking agents

As some diabetics are not suitable candidates, it is essenti that the physician familiarize himself with the indications, limit of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, an during the initial test period should communicate with the phys

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On the one hand, you know that diet d weight control are the initial and essential ındations for the management of adult-ɜet, non-ketotic diabetes. When these asures prove satisfactory, no additional rapy is indicated. On the other hand, you ɔw that if these measures fail the addition of Orinase to the regimen can often help lower blood sugar. Orinase lowers blood sugar as effectively today as it did when you first prescribed it.

You also know the importance of close monitoring of the patient. Although uncommon, severe hypoglycemia may occur if the dosage is not tailored to suit his requirements.

In short, Orinase is a drug you're familiar with, and probably have confidence in.

And that may be the best recommendation Orinase can have.

Orinase®

0.5 g. tablets

(tolbutamide, Upjohn)

n daily, and during the first month report at least once weekly physical examination and definitive evaluation. After a month, aminations are recommended monthly or as indicated. Ap-arance of ketonuria, increase in glycosuria, unsatisfactory vering or persistent elevation of blood sugar, or failure to tain and hold clinical improvement indicate nonresponsive-ss to Orinase (tolbutamide). Orinase does not obviate need for intaining standard diet regulation. Uncooperative patients ɔuld be considered unsuitable for therapy. Prescriptions should refilled only on specific instruction of physician. In treating d asymptomatic diabetic patients with abnormal glucose erance, glucose tolerance tests should be obtained at three-six-month intervals. Orinase is not an oral insulin or a substi-e for insulin and must not be used as sole therapy in juvenile betes or in diabetes complicated by acidosis or coma where ulin is indispensable.

f phenformin is prescribed in combination with Orinase, ap-ɔpriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, y occur and may mimic acute neurologic disorders such as ebral thrombosis. Certain factors such as hepatic and renal ease, malnutrition, advanced age, alcohol ingestion, and enal and pituitary insufficiency may predispose to hypogly-mia and certain drugs such as insulin, phenformin, sulfona-des, oxyphenbutazone, salicylates, probenecid, monamine dase inhibitors, phenylbutazone, bishydroxycoumarin, and enyramidol may prolong or enhance the action of Orinase and rease risk of hypoglycemia. Orinase long-term therapy has en reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: *0.5 g. Tablets*—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

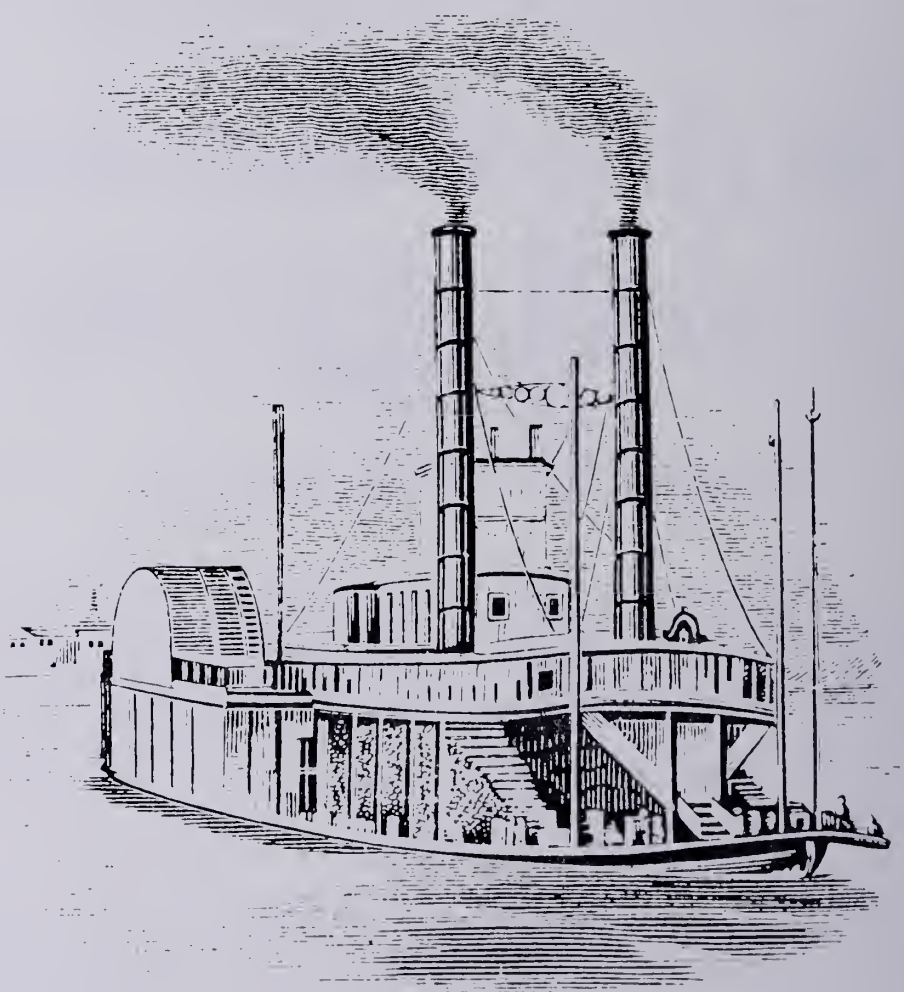
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Upjohn

Alabama's first meeting of a Medical Society was held at Mobile in 1847. Physicians from the northern section of the State probably traveled by horseback or stagecoach to Tuscaloosa, then by riverboat to Mobile.

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a typical proctological patient



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Precaution Prolonged or excessive use of Anusol-HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

Dosage and Administration Anusol-HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol: One suppository in the morning, one at bedtime, and one immediately following each evacuation.

And for long-term patient comfort... recommend Anusol®
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HOSPITAL

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Phone: 205 - 836-7201

A patient centered not for profit hospital for intensive treatment of nervous disorders . . .

Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium. Individual patient care has been the theme during its 46 years of service.

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HILL CREST is fully accredited by the joint commission on Accreditation of Hospitals and is also approved for Medicare patients.

Hill Crest
HOSPITAL
BIRMINGHAM, ALABAMA

Typical of many patients with congestive heart failure, he also suffers from severe anxiety, a psychic factor that may influence the character and degree of his symptoms, such as dyspnea. His apprehension may also deprive him of the emotional calm so important in maintenance therapy.

Aid in rehabilitation

Specific medical and environmental measures are often enhanced by the antianxiety action of adjunctive Libritabs (chlordiazepoxide). Libritabs can also facilitate treatment of the tense convalescent patient until antianxiety therapy is no longer required. Whereas in geriatrics the *usual daily dosage* is 5 mg two to four times daily, the *initial dosage* in elderly and debilitated patients should be limited to 10 mg or less per day, adjusting as needed and tolerated.

Concomitant use with primary agents

Libritabs is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensives, vasodilators and oral anticoagulants, whenever excessive anxiety or emotional tension adversely affects the clinical condition or response to therapy. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

The positive power of

Libritabs®

(chlordiazepoxide)

5-mg, 10-mg, 25-mg tablets

t.i.d./q.i.d.

up to 100 mg daily

for severe anxiety accompanying congestive heart failure

ROCHE

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Division of Hoffmann-La Roche Inc.
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THE JOURNAL

of the

Medical Association of the State of Alabama

Volume 41 • May, 1972 • No. 11

Office of Publication
19 So. Jackson St. — Montgomery, Ala. 36104
Subscription Price — $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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rheumatoid arthritic blowup...

Tandearil® Geigy

oxyphenbutazone NF tablets of 100 mg.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervisicn. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequant intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral iesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other avidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or iess; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistant dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland onlargemont due to the drug; polymyalgia rhaumatica and temporal arteritis; patients receiving other potant chemotharapeutic agents, or long-term anticoagulant thorapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest affective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and comptete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sultonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug raduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevanted by reducing dosage. If adema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adversa reactions; complete physical examination including check of patient's weight; completa weekly (especially for the aging) or on every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug, its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rhaumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia, ulcerative stomatitis, salivary gland enlargement
(B)98-146-800-E

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

TA 8386-9



a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® can be compared to codeine in analgesic efficacy, it is not a narcotic. So patients receiving Talwin for prolonged periods face fewer of the consequences you've come to expect with narcotic analgesics. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe—day or night—even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (1583)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

President's Page



DR. PHILLIPI

In March Dr. Grover Murchison appeared before the Board of Censors requesting that the State Association take over the responsibility of the "Doctor for a Day" program. This had heretofore been sponsored by the Academy of Family Practice. The Board agreed that this should be an activity of the Association as a whole.

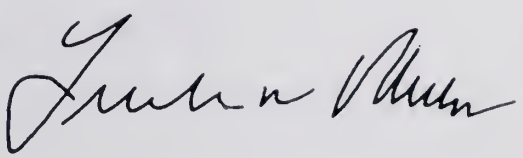
When the program was first envisioned, I was skeptical as to what good could come of it. It has, however, proved to be the best public relations activity yet undertaken by physicians of this state. I agree with Dr. Wood Herren, as he stated in his annual report this year, that we should place more emphasis on continuing education and give it priority over political activity. However, for self preservation we cannot fail to take advantage of such opportunities as this. Our cultist friend and the optometrists would jump at such an opportunity.

This program has had a tremendously favorable affect on the legislators. Our image has been enhanced. Several instances have occurred where the physicians were able to render immediate attention and they conducted themselves well. When the situation indicated, they summoned an ambulance and transported the patient to the hospital going to the hospital in the ambulance with the patient. This has great impact.

While serving the physician has the privilege of the floor. While there he has the opportunity to influence legislation pertaining to medicine. For some reason legislators have been hesitant to bring up legislation unfavorable to medicine while a physician is on the floor.

In the past Montgomery physicians have born the brunt of this service. But for best results physicians from all sections of the state should serve. It is an interesting experience. While serving the physician should at least become acquainted with the legislators from his district or section.

We have asked Dr. Archie Thomas to take charge of this program and to arrange the schedule. He would appreciate hearing from the physicians willing to serve.



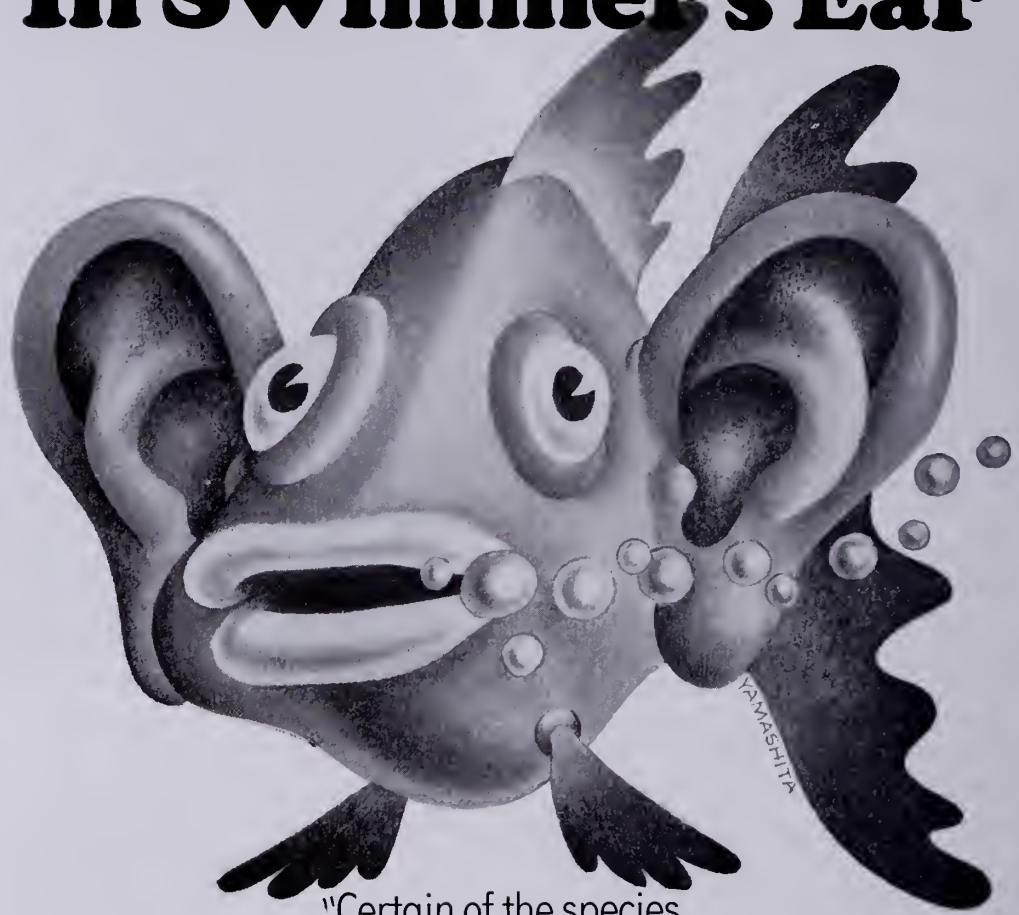
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natatory pursuits."

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Formula: Contoins (w/w) 0.2% FURACIN, brand of nitrofurc zone, 0.375% Micofur®, brand of nifuroxime, and 2% diperodon hydrochloride dissolved in water-soluble, nondrying, hygroscopic polyethylene glycol.
Indications: For treatment of bacterial otitis externo, bacterial otitis media and otomycosis. In otitis media, this preparation is not effective if the tympanic membrane is intact.
FURACIN (nitrofurazone) and Micafur (nifuroxime) are active against a variety of gram-positive and gram-negative organisms. Activity versus Pseudomonas sp. is limited to certain strains. Micafur (nifuroxime) is active against Candida (Monilia) albicans.

Precautions: Sensitization may occur with prolonged use and is more likely to develop in eczematous otitis externa To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.
This preparation is not indicated for use in treatment of cholesteatoma, where surgical intervention is necessary
Supplied: Bottle of 15 cc. with dropper.

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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

ACTION . . . . . ACTION . . . . . ACTION begins with the Woman's Auxiliary to the Medical Association of the State of Alabama. One of the most invigorating aspects of this organization is its varied programs and projects. There is something for every member. This group is heading in a new direction. Physicians' wives are adopting a new image that stresses community involvement. These women are well educated and more aware of what is happening outside their homes. They are interested in being good wives, mothers and homemakers; but they have a need for personal involvement in making decisions that affect their communities. They are especially interested in working with their husbands in helping solve health problems of today. Fashion shows, afternoon teas, and bridge parties are fast becoming things of the past. Many Auxiliary members are meeting the challenge of today by serving as leaders in making their communities better places to live. This is why the Auxiliary is not just another social organization. It can be called a great service organization.

No one dictates from either the state or the national level what the program of the County Auxiliary will be. Each local group determines what it wants to do as a group and as individuals, with the approval of the local medical society. It has been said that "Leadership is the process of helping people to do the worth-while thing they want to do." This is true of the National and State Auxiliaries. Their informed and knowledgeable guidance gives the local groups many ideas, and furnishes them with the know-how and the educational materials needed to carry on their programs and projects.

We want our husbands to have an understanding of the programs we will be involved in this year. Your support and guidance will be deeply appreciated. Our state emphasis will be on ACTION projects and individual responsibility in carrying on these programs.



MRS. HANSBERRY

Legislation will be of major interest, with many of our members already actively involved in campaigning. National Health Insurance bills will continue to be of interest to each member. The *AMAERF* goal will be another challenge that will take a lot of hard work and enthusiasm. All husbands will be needed in this effort. *Health Manpower* will be a high priority. Auxiliary members will be supporting health career clubs, and helping young people learn of the opportunities in our health care system. *International Health Activities* will give members a chance to show concern for their

(Continued on Page 876)

fellow men in countries throughout the world. *Health Education* will be a broad area, with programs and materials available to parents, teachers, and children. These will include mental health, physical fitness, nutrition, health frauds and quackery, safety, family planning, drugs, tobacco, alcohol, V. D. and family life. With a program like this, how can any member be bored.

I am looking forward to a good year with you and your wives.

A. Rae Hansberry

A. Rae Hansberry
President

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New Leadership Takes Helm

The 111th Annual Session of the Medical Association of the State of Alabama has passed into history. Many will say that no other general assembly in this decade has been confronted with more troublesome problems fraught with the duress of consequences. Some contend that the fate of Medicine's voice in public affairs hung by a slender thread.

But as usual, wise counsel on all sides prevailed and this Association has emerged stronger and more united than it has been in recent history.

During the next year we can expect the gavel of office to be grasped firmly in the hand of a young and experienced physician from the coastal plains of Alabama. Dr. Frank M. Phillippi, Jr. has undergone his baptismal of fire as a vice president for the Southwestern division, as a member of the Board of Trustees, and a director of the Alabama Medical Political Action Committee and, finally, as president-elect. He knows the problems which confront organized medicine in this state. He has made it clear that he will work without surcease to solve them.

President Phillippi has strong opinions and scant reluctance to express them vigorously. He will attack Medicine's foes with the same vigor with which he will support Medicine's rights and prerogatives.

The backup men to President Phillippi during the next year will be president-elect E. E. Camp, M. D., of Huntsville. Also no shrinking violet when it comes to voicing his opinion on matters of utmost moment. Dr. Camp is no stranger to the members of this Association, having toiled in the vineyard of the committee structure of ALAPAC, as well as his own specialty organization, with more than usual success.

MASA can count additional blessings in the election of five other men to positions of leadership: Drs. Leon C. Hamrick and H. H. Hutchinson to the Board of Censors; Dr. Edwin G. Waldrop as vice-president for the Northwestern Division, and Drs. Dewey A. White, Jr. and William F. Reynolds to the Board of Trustees.

With all of the above dedicated and highly motivated men in offices of greatest responsibility, the potential of this Association has no limitation.

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Expand Or Expire

By a unanimous vote, save one, with perhaps a half dozen abstentions, the College of Counsellors and House of Delegates has established a bold new course of service to the membership.

The issue was placed before the voting body at the 111th Annual Session by the Board of Trustees, which had determined that the strength of organized medicine lies in expansion of services of a meaningful nature to those who support it both financially and physically.

The Board of Trustees determined that this Association must develop broad new programs of public relations and legislation activities if the profession of medicine is to survive in its present form. It also determined that the Central Office of this Association should be geared entirely to assisting the physician in meeting his needs.

An Association-sponsored program guaranteeing long-term professional liability insurance to members at premium rates based on Alabama experience, with screening of participants and a voice in adjudication of claims, was deemed essential to the success of any plan.

Such a program is now on the horizon and should become a reality by the time this Journal is published. The insurance protection thus provided will be added to Association-sponsored plans already in effect in hopes that one day soon the membership can turn to one source for its entire insurance protection.

It has also been determined that the Central Office has the capacity, when expanded, to provide total printing needs for every physician in this state, with savings ranging from 50 to 75 percent of his present cost.

These two programs alone should return to the membership annual savings far in excess of their present annual dues. But to accomplish them there must be enlargement of the Central Office Building to approximately double its present floor space. After hearing eloquent discussions from the floor concerning the potential benefits Counsellors and Delegates lost little time in voting to expand the building and launch the programs.

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Continuing Education: Responsibilities And Directions

Margaret S. Klapper, M. D.
Director, Division of Continuing Medical Education,
University of Alabama School of Medicine

Chairman, Committee on Education,
Medical Association of the State of Alabama

I come to you this morning wearing two hats, one as Director of the Division of Continuing Medical Education of the School of Medicine in Birmingham, the other as Chairman of the Committee on Education of the Medical Association of the State of Alabama. I shall speak briefly to you upon the first and in somewhat greater detail upon the second—the role of organized medicine and particularly the state medical society in continuing medical education.

Continuing education is a basic ingredient for physician competence which in turn is a fundamental element of quality medical care. The role of the physician as a "life-time" student is accepted, at least philosophically, by most if not all of us. We each accept a major responsibility for our own continuing education and continued professional growth, and the great majority of us are extremely well-motivated to be certain we are doing a good job. But with whom do we share this responsibility, where do we go for direction and leadership in this world of expanding medical knowledge?

The School of Medicine in Birmingham has provided continuing medical education since it became a four year school in 1945. At first sporadically, but since 1962, through the Division of Continuing Medical Education, it provides a variety of intramural programs as well as extramural programs structured to the local situation. It attempts to be responsive to the practitioners' needs and now has faculty representation of practitioners from throughout the state.

A program unique to Alabama and provided by the Medical School in Birmingham with some ARMP support is the Medical Information Service via Telephone (MIST). It is a mechanism whereby any practitioner of medicine in Alabama is provided immediate access to the appropriate faculty of the Medical School in a person-to-person relationship for verbal discussion of patient-related problems and follow-up. The operational pattern of MIST is relatively simple. A single toll-free telephone number provides physicians and other health professionals in Alabama immediate access to Medical Center personnel. This is accomplished in the office of the Division of Continuing Medical Education and calls are recorded, monitored, and data extracted for analysis and study. Detailed descriptions and early observations are reported in previous publications.[1, 2, 3] MIST is by far our most successful endeavor in continuing medical education and there have been more than 26,000 calls since the service was started less than three years ago. More than half the practitioners in Alabama have used MIST and the number of calls has shown no tendency to level off.

I would like to speak in greater detail upon the topic of organized medicine and continuing medical education. The AMA in recent years has placed increasing emphasis upon continuing education, the maintenance of physician competence, and the delivery of quality health care. In 1968 and 1970 it sponsored national conferences for state medical

Presented at the 111th Annual Meeting of the Medical Association of the State of Alabama in Montgomery, Alabama, April 20, 1972.

association representatives on continuing medical education so that state associations might formulate their roles in continuing education.[4,5] A recommendation of the first conference was that state associations establish strong committees of education with appropriate budgetary support and some full-time staff. In 1947 the American Academy of General Practice pioneered in requiring its members to engage in programs of continuing education to maintain membership. Twenty years passed before another medical organization established similar requirements. The Physicians Recognition Award of the AMA is a program of credit for participation in continuing education. Several specialty boards are considering institutional systems of recertification, although none has gone so far as to require re-examination. The newly formed Board of Family Practice will issue certification for a six-year period, and physicians will have to meet criteria for recertification.

Dwight Wilbur in his inaugural address to the AMA in June of 1968 stated, "Basically public opinion is the most powerful determinate in the ultimate force that in the long run will determine the social, economic, and political course of this country and it will decisively determine the future pattern of health care." [6] When more than 50% of the health care dollars expended in this country are of third party origin, those who are putting up the money want to be sure they are getting their money's worth. This fact must be accepted and accountability to the public is a fact of the here and now! It is reflected in the President's Advisory Commission on Health Manpower Report of 1967 which recommended that "professional societies and state governments should explore the possibility of periodic relicensing of physicians and other health professionals. Relicensures should be granted either upon acceptable performance in continuing education programs or upon the basis of challenge examinations in the practitioners own specialty." [7] A more recent report from the Department of Health, Education and Welfare in reference to relicensure stated "The typical state requirements may provide adequate safeguards at the initial level of entry into the profession. It is a considerably less effective guarantee, however, against the growing problem of professional obsolescence." [8]

The following titles of presentations from the recent meeting of the American Medical Association Congress on Medical Education, February 1972, are representative of trends and directions in continuing medical education and reflect the pressures being exerted upon the profession:

1) Peer review and the implications of the practical problem-oriented record.
2) Relicensure for continued practice.
3) Periodic requalification as related to medical society membership.
4) Specialty board attitudes toward recertification.
5) New approaches to the evaluation of clinical competence.

Oregon was the first state to require participation in continuing medical education for continued membership in the state medical society and this year a number of physicians were dropped from membership for failing to comply. Several states soon followed suit and plans are underway in a number of others. New Mexico is the first state to pass legislation and establish legal requirements of continuing education for relicensure. The Joint Commission on Accreditation of Hospitals now requires that accredited hospitals provide continuing medical education and show evidence of participation.

This brings us to the question: How does the Medical Association of the State of Alabama express its responsibility toward the continuing education and professional competency of its membership? Within the structure of the Association there is a committee on education which has worked actively for a number of years to encourage the state to take greater and more specific responsibility for continuing education. In January of 1970, a Position Paper was sent to the Board of

Censors and Board of Trustees from the Education Committee expressing its views and recommendations concerning the role the State Association should be playing in the education of its membership. This Paper recommended that an Office of Education staffed with full-time individuals be established within the state office of the Medical Association. The Paper was approved by the Board of Trustees and studied by an Ad Hoc Committee appointed by the Board of Censors. The recommendations of this Committee were essentially those of the Position Paper: [9]

"1) That the Medical Association of the State of Alabama actively participate in the continuing education of its membership. Alabama, being a state with one medical school and geographically designed as a region for the Regional Medical Program, is ideally suited to a tripartite arrangement for continuing medical education between the State Medical Association, the School of Medicine, and the Alabama Regional Medical Program.

2) That the Medical Association of the State of Alabama take leadership in assessing the educational needs of its membership and seeking assistance from its membership, the hospitals, the School of Medicine, and the Alabama Regional Medical Program toward supplying these needs.

3) That the Medical Association of the State of Alabama is committed to the idea that continuing medical educational programs be established at appropriate areas throughout the state and that its membership avail themselves of these opportunities. The Association offers its assistance in the development and maintenance of continuing education programs at county and multi-county levels.

4) That a qualified medical education director (preferably a physician) be employed on the administrative staff of the Medical Association of the State of Alabama for implementation of the above. He is to be appointed by the Committee on Medical Education with approval and concurrence of the Board of Censors, and reports to the Board of Censors through the Committee on Medical Education.

5) That the Committee on Medical Education and Hospitals be re-named the Committee on Medical Education and its membership be broadened to include representatives from various geographic areas of the state, the Alabama Regional Medical Program, the University of Alabama School of Medicine, Comprehensive Health Planning and appropriate voluntary health agencies.

6) In order to implement the above, the Board of Censors is requested to take necessary steps to provide financial support for this program."

Although two years have passed, funds for the establishment of an office have not been provided nor have these recommendations been implemented. It is hoped that by the termination of this meeting the necessary funds will have been assured. During these two years the forces and pressures for delivery of quality health care, the maintenance of physician competence and public accountability have increased and it becomes even more imperative that state associations define their roles and responsibilities toward better assurance and maintenance of the professional competency of their memberships.

The emphasis upon continuing education at AMA's Congress of Medical Education in Chicago of February 1972 clearly indicated that the issue now is not whether continuing education will be required of physicians but what system will be used and how it will be enforced. If organized medicine in Alabama is to accept leadership for the quality of medicine in Alabama it is essential that it identify its role and define its responsibilities promptly. The time is here and now!

The Medical Association of the State of

Alabama can and should take a more specific responsibility in maintaining the professional competency of its membership. It can and should participate in establishing criteria for assessment of physician competency. It can and should develop criteria for requirements of continuing education. It can and should make the decision regarding legislation for relicensure or recertification and what the criteria for these might be. It can and should develop mechanisms for assessing and measuring quality health care delivery and help develop programs to meet the desired level of quality care through physician education.

In summary, the question, "Continuing Education—Whose Responsibility?," may be answered by stating that it is a shared responsibility and that continuing education, professional competency and the delivery of health care are intimately entwined. The responsibilities are shared by the individual physicians, the public, the medical schools and all parts of organized medicine and organized society. In Alabama the state association as that branch of organized medicine which speaks for the physicians of Alabama will be derelict unless it moves promptly into an expression of its role in continuing education and physician competency.

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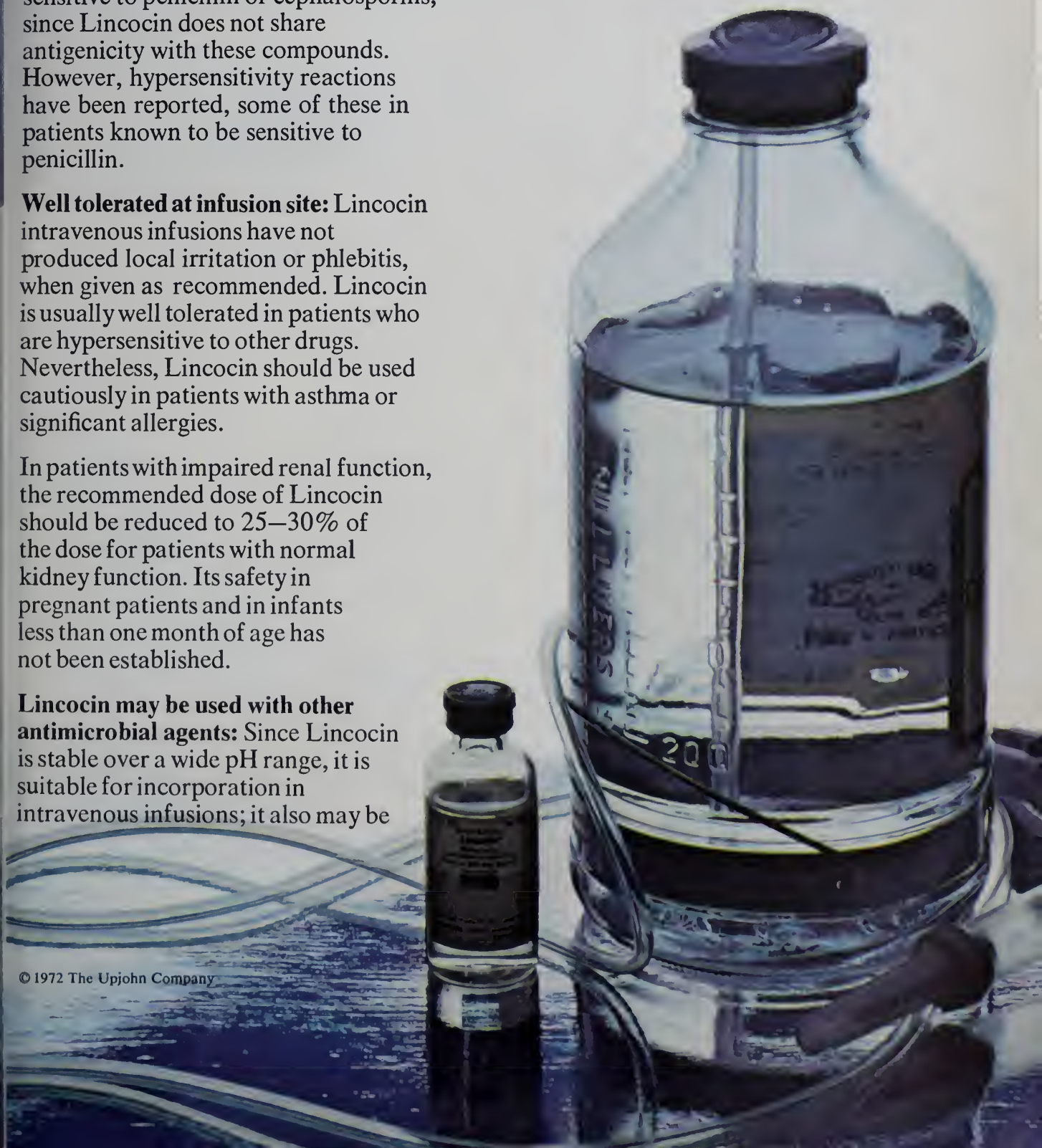
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Shopfner, Charles Ewell, b 21, mc U. Kansas '49, recip. Kansas '71, 1919 South 7th Avenue, Birmingham, Alabama 35233. R.

Simpson, David Charles, b 34, mc U. Alabama '68, recip. NBME '69, 1909 Laurel Road, Shades Mountain Clinic, Birmingham, Alabama 35216. Pd.

Straughn, John Michael, b 41, mc U. Alabama '66, sb 67, 1919 South 7th Avenue, Birmingham, Alabama 35233. ObG (Resident).

White, Boyce Joseph, II, b 44, mc U. Alabama '70 recip. NBME '71, 1801 Vestaview Lane, Birmingham, Alabama 35216. ALR (Resident).

Witten, David Melvin, b 26, mc Washington U. '54, recip. Minnesota '71, 1919-7th Avenue South, Birmingham, Alabama 35233. R.

Younger, John Benjamin, Sr., b 37, mc Tulane '62, recip. Louisiana '71, 1919 South 7th Avenue, Birmingham, Alabama 35233. ObG.

Madison County

Adams, Curtis L. V., b 34, mc U. Alabama '62, sb 63, 813 Franklin Street, Huntsville, Alabama 35801. P.

Beck, Henry Donald, Jr., b 36, mc Louisiana State University '66, recip. La. '71, 700 Green Street, Huntsville, Alabama 35801. Or.

(Continued on Page 894)

Pinworm therapy is often a family affair



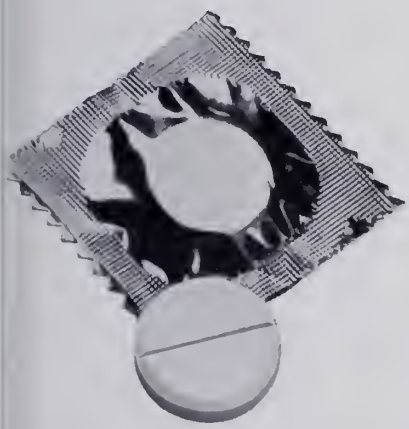


Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live Ascaris in the mouth and nose. Hypersensitivity reactions

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addendum

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Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

(Continued from Page 891)

Marshall County

Davis, Larry Jan, b 41, mc U. Alabama '67, recip. NBME '68, 4004th Avenue, N. W., Arab, Alabama 35016. GP.

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Reed, Josiah Frederick, Jr., b 24, mc U. Virginia '50, recip. Va. '71, 2119 East South Boulevard, Montgomery, Alabama 36111. U.

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Farris, Lawerence Augustus, Jr., b 42, mc U. Alabama '69, recip. NBME '70, P. O. Box 274, Helena, Alabama 35080. GP.

Walker County

Ferrell, Thaddeus Hagan, b 44, mc U. Mississippi '69, recip. Miss. '71, P. O. Box 1389, Jasper, Alabama 35501. GP.

O'Rear, Vernon Delane, b 36, mc U. Alabama '61, sb 62, 1600-5th Avenue, Jasper, Alabama 35501.

MEMBERS DECEASED

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Frederick, Ralph Hobart, Red Bay, Alabama, Deceased 2/7/72.

Jefferson County

Hardy, Walter B., Birmingham, Alabama, Deceased.

Lauderdale County

Norvell, Lester Rice, Florence, Alabama, Deceased 2/29/72.

Members Removed

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Banning, Philip G., Dothan, Alabama, Transfer to Nonmember.

Roberts, Millard M., Dothan, Alabama, Transfer to Nonmember.

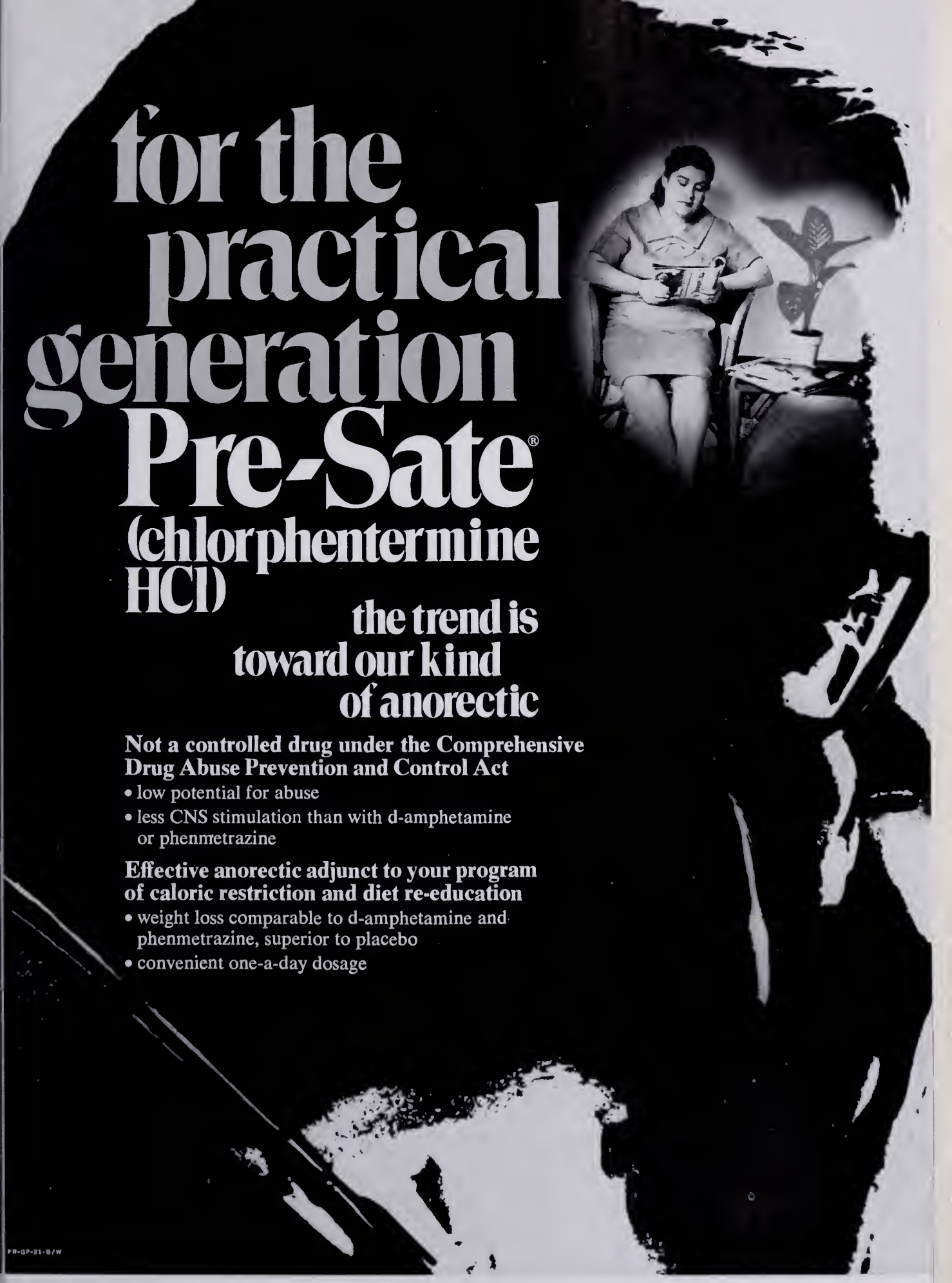
Jefferson County

Giles, Charles H., Orlando, Florida, Moved from State.

(Continued on Page 913)

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CAUTION: Federal law prohibits dispensing without prescription.
Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.
Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.
Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children: Not recommended for use in children under 12 years of age.
Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.
Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis end, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.
Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.
Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of e nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.
How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 end 1000 tablets.
Full information available on request.

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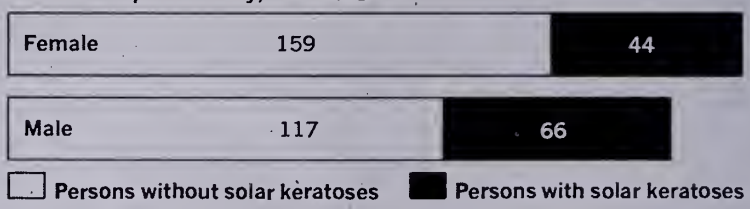
What it means to live and work in Tipton County, Tennessee

Persons who are white and over 40 have one chance in four of having solar keratoses... which may be premalignant

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

Prevalence of solar keratoses in white persons over 40 in Tipton County, Tennessee



*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



Solar, actinic, senile keratoses

Called by many names, the typical lesion is flat or slightly elevated, brownish or reddish in color, papular, dry, adherent, rough, sharply defined; usually multiple lesions, chiefly on exposed portions of the skin.

Sequence/selectivity of response

Erythema in areas of lesions may begin after several days of therapy; height of reaction (only in affected areas)* usually occurs within two weeks, declining after discontinuation of therapy. Since this response is so predictable, lesions that do not respond should be biopsied to rule out the presence of a frank neoplasm.

Cosmetic results

Cosmetic results are highly favorable. Incidence of scarring is low—important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.

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Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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Volume 41 May, 1972 Number 11

Carcinoid Tumors Arising In Meckel's Diverticulum

by James C. Matthews, M. D.
Fairfield, Alabama

Meckel's diverticulum is the most common congenital anomaly of the alimentary tract and is found in one to two per cent of individuals at autopsy. It is two to three times more common in males than in females and in the majority of cases is an incidental finding during laparotomy for another condition. It is not uncommon to find other lesions in a Meckel's diverticulum. Of all the lesions found in Meckel's diverticulum, neoplasm is the least common. Carcinoid tumors are exceeded only by leiomyosarcoma in frequency of occurrence of malignant tumors in Meckel's diverticulum.[7]

Stewart and Taylor,[12] are credited with the first documented case in 1926. Hicks and Radinsky,[6] reported a carcinoid arising in a Meckel's diverticulum in 1922, but according to Becker,[2] this was probably aberrant gastric mucosa. Weitzner,[14] in 1969, reviewed the world literature and reported a case of his own, bringing to 40 the total number of reported cases. Six additional[4,1,3,8,10] cases were found in the available literature subsequent to this. The following case report stimulated this current review.

From the Department of Surgery, Lloyd Noland Hospital, Fairfield, Alabama.

CASE REPORT

A 73 year old Caucasian male was admitted to the hospital for elective cholecystectomy. He had been hospitalized six weeks previously and treated medically for acute cholecystitis. His studies, on that admission, revealed a mild elevation of BUN, creatinine and bilirubin. The remainder of his studies were within normal limits. Subsequent to this, examination of the gallbladder on two occasions had revealed a non-functioning gallbladder but he did have calcification in the area of the gallbladder suggestive of gallstones. Past medical history revealed hospitalizations for bilateral inguinal hernia repairs and a transurethral resection of the prostate. His only medication consisted of an unknown anti-hypertensive drug which he had taken for approximately 15 years.

Physical examination revealed a blood pressure of 150/80; pulse was 70. The only significant physical findings were mild bilateral wheezes. The remainder of the examination was within normal limits. All laboratory studies were normal on this admission.

At laparotomy, he was found to have a very thickened scarred gallbladder containing one large gallstone, approximately 2 x 3 centimeters in greatest dimensions. His liver

was normal to palpation throughout. On abdominal exploration, he was found to have a Meckel's diverticulum located approximately 50 centimeters proximal to the ileocecal valve. This was in the usual position on the antimesenteric border of the ileum. The diverticulum was approximately two centimeters in diameter at the base and approximately five centimeters in length. A small, firm mass, approximately one and one-half centimeters in diameter was palpated in the tip of the diverticulum. In the adjacent bowel mesentery, a hard mass of lymph nodes was palpated. One of the nodes was biopsied and was reported as metastatic carcinoid tumor on the frozen section. A block resection of approximately 35 centimeters of the small bowel and small bowel mesentery containing the Meckel's diverticulum and the lymph nodes, was performed. The cholecystectomy was done and the abdomen was closed. Pathological diagnosis was "carcinoid tumor in the tip of the Meckel's diverticulum with metastasis to the regional lymph nodes." The patient's postoperative course was uncomplicated.

DISCUSSION

Carcinoid tumors arise from argentaffin (Kulchitsky cells) located in the base of the crypts of Leiberkuhn within the intestinal mucosa.[5] The rare occurrence within a Meckel's diverticulum as compared to the ileum probably reflects a ratio of argentaffin cells in the Meckel's diverticulum compared to the total number of argentaffin cells in the small intestines.

Carcinoid tumors of Meckel's diverticulae have been encountered four times as often in men as in women. This is expected in view of the greater incidence of Meckel's diverticulum in men and since carcinoids of the small intestines are about twice as common in men as in women.[14] This represents a total of 22 per cent and compares favorably with the report of 34 per cent metastasis from the small intestines.

For many years, carcinoids were divided into benign and malignant forms. MacDonald,[9] after a very careful study, considered all extra appendiceal carcinoids malignant and described a classification of invasiveness. The usual malignant criteria of cell anaplasia and mitosis are not applicable to carcinoids and malignancy must be determined by gross or microscopic evidence of invasiveness. All, however, are probably malignant but of a low biological potential.

The carcinoid syndrome which attracted so much attention following Thorson's[13] report in 1954, was found in only five cases.

TREATMENT

Based on experience gained with appendiceal carcinoids, simple excision of the diverticulum should be adequate if the tumor can be completely removed and there is no evidence of local invasion of metastatic disease.[11] With lymph node metastasis, a wider resection is required.

SUMMARY

A review of the literature revealed that only 46 cases of carcinoid tumors arising in Meckel's diverticulum have been reported.

An additional case of malignant carcinoid with metastasis is reported.

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What No One Knows, Though Everyone Should, About IPPB Machines PART II—RETEC

by D. S. Tysinger, Jr., M. D.
Dothan, Alabama

The second type of IPPB machine to be discussed is very much like the Bennett in principle. It is a pressure-limiting machine.

To start with, the same wall oxygen at 50 PSI and 130 L/min. flow is used. Now, the first leak beyond the wall outlet is a variable leak. It is accomplished by a flow meter. (FIGURE ♯10) This would be Leak *A* of the Bennett principle.

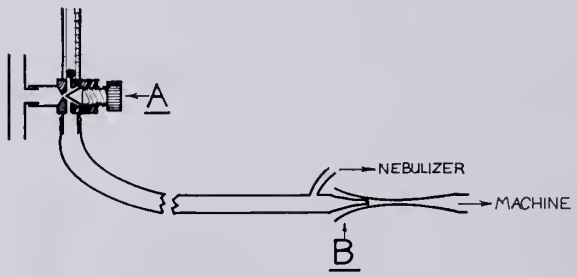


Figure No. 10

The next leak which would be *B* of the Bennett principle is here also a fixed leak. This is different from the Bennett. Here, the fixed leak *B* is the venturi and nebulizer flow line. (FIGURE ♯10) Since this is pre-set and determined by the manufacturer no changing can be made for air-oxygen mixture. It must be run as pre-set without any additions or deletions of air or oxygen.

The next departure from the Bennett principle is also here. The on-off valve by the previous principle was from the chamber between Leak *A* variable, and Leak *B* fixed. In this system the on-off valve is beyond the fixed Leak *B*.

In this type machine the on-off valve is a fixed leak. Also, the flow path beyond this leak can go in one of two directions:

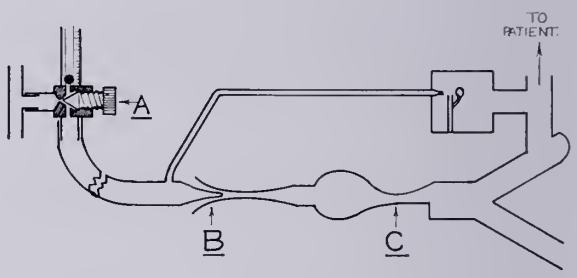
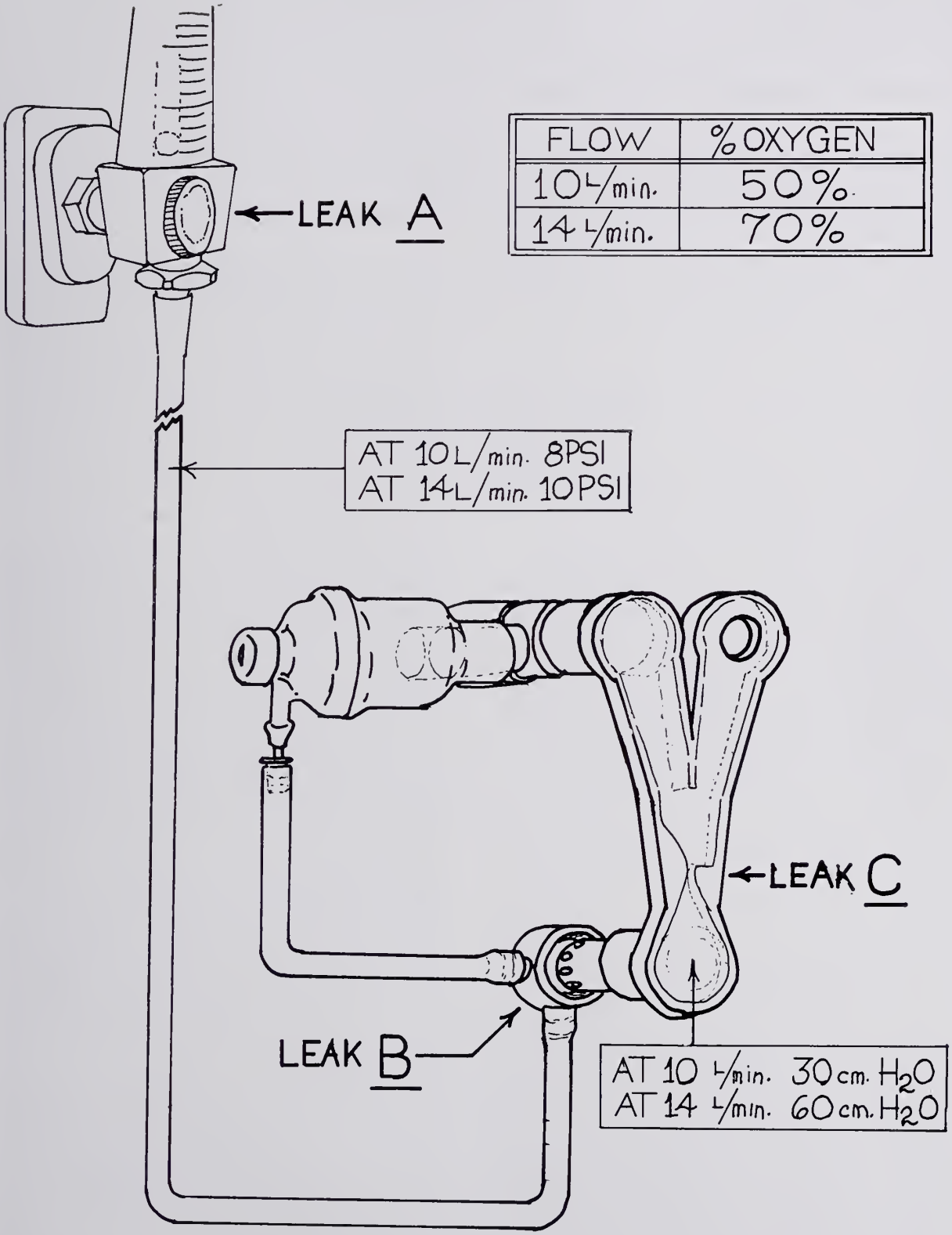


Figure No. 11

(1) into the patient, or (2) out the exhalation valve. (FIGURE ♯11) Here, as the patient breathes in the air entering area *Z* below leak *C* the air finds less resistance to flow up tube *X* to the patient and flow is in this direction. As the flow builds up and the patient breathes out, there is back pressure (which is determined by the flow from the wall outlet) and the wall flow continues so that wall flow, intrainment flow, nebulizer flow and patients' expiratory flow all exit at the same time through tube *Y*. This does offer some resistance to flow and causes a positive expiratory pressure at the patient's mouth.

It produces a type I mask pressure curve (as described by Cornand, Werko, Motley, and Richards) rather than a type III as recommended for IPPB machines.

To review this machine from wall plug to patient. In this system a standard flow meter reduces wall or tank gas pressure and flow to desired flow and pressure. The flow meter is Leak *A*. Then, a fixed venturi and nebulizer drive Leak *B*. Here, nebulizer flow is dependent on flow pressure between Leak *A* and *B* as is *intrainment* flow of the venturi. These are fixed also by the wall flow



FLOW	% OXYGEN
10 L/min.	50%
14 L/min.	70%

Flow Diagram No. 3

TABLE #3

Flow Water Setting	Pressure between Leak A and Leak B	Pressure between Leak B and Leak C	Nebulizer Flow	Venturi Jet Flow	Intrainment Flow	Total Patient Flow	Cycling Pressure Required	End Expiratory Pressures	Nebulizer output cc/min.	Oxygen Concentrations
10L/min	8PSI	30cmH20	3L/min	7L/min	20L/min	30L/min	-3cmH20	5cmH20	0.33cc/min	50%
12 L/min	9PSI	45cmH20	4.5L/min	7.5L/min	28.5L/min	37.5L/min	-4cmH20	7cmH20	0.42 cc/min	50%
14 L/min	10PSI	60cmH20	6L/min	8L/min	31L/min	45L/min	-6cmH20	10cmH20	0.5cc/min	50%

setting. Then, flow goes on to a second fixed Leak *C* which is used instead of an on-off valve and is designed to switch air flow from patient tube to exhalation tube as pressures in the patient tube change. These changes are both positive on inspiration and expiration except for the negative pressure necessary to reverse the flow back to the patient to reinstitute inspiration at the end of expiration. This is the Retec Principle.

The Retec fluiditic is simpler to diagram and explain. See flow diagram ♯3 and Table ♯3. Starting with wall oxygen at 50 PSI and 130 L/min. flow, the first stage Leak *A* is the flow meter. This machine is designed to run between 10 L/min and 15 L/min. At 10 L/min. the tubing between Leak *A* (the flow meter) and Leak *B* (the venturi nebulizer leak) is 8 PSI. At 12 L/min. this increases to 9 PSI. At 14 L/min. this reaches 10 PSI. The flow is as set by the flow meter. At Leak *B* there is a division of flow to nebulizer and venturi jet. At 10 L/min. 3L goes to drive the nebulizer and 7L goes to drive the venturi jet. The venturi intrainment is 20 L/min. when the flow meter (Leak *A*) is set at 10 L/min. This gives a total of 30 L/min patient flow. At 12 L/min nebulizer flow increases to 4.5 L/min and 7.5 L/min venturi jet flow which causes 28.5 L/min. intrainment. This gives a total flow of 37.5 L/min. to the patient. At 14 L/min. nebulizer flow increases to 6 L/min., venturi jet flow increases to 8 L/min. and venturi intrainment increases to 31 L/min., giving a total of 45 L/min patient flow. The oxygen concentration is roughly 50 per cent all the way through.

The chamber between the venturi jet and the Leak *C* (on-off valve) has a high pressure against which the venturi jet causes intrainment flow. This pressure remains constant so that during inspiratory and expiratory phases the pressure here and intrainment flow is constant. The pressure in this section is 30 cmH2O pressure at 10 L/min; 45 cmH2O at 12 L/min; 60 cmH2O pressure at 14 L/min.

The flow beyond Leak *C* (the on-off valve leak) falls to zero at the patient's mouth level delivering only flow. As the patient breathes in, pressure is developed to a point at which back pressure from the patient causes the flow pattern just above Leak *C* to revert to the exhalation tube. Expiration is accomplished through the same flow channel. Machine flow (this flow plus intrainment) is the same inspiration or expiration. During expiration the patient's flow is pushed against this flow causing a positive pressure during all of expiration. The pressures developed during expiration depend on patient effort. If the patient forcibly blows out pressures can go dangerously high. The end expiratory pressures herein presented are the lowest recorded with trained subjects. The pressure at end of expiration is 5 cmH20-10 L/min; 7 cmH2O at 12 L/min and 10 cmH2O at 14 L/min. This increases the functional residual volume and decreases the cardiac output. This is a type I mask pressure curve. To turn the machine back to patient's flow tube requires rather strong negative pressure, for example; 3 cmH2O at 10 L/min; 4cmH2O at 12 L/min; 6 cmH2O at 14 L/min. Here again high subambient

pressures can be produced by patient effort. The pressures herein presented are the least subambient obtained with trained subjects.

The moisture delivery is small at 30 L/min with 10L dry line oxygen and 20 L/min. being intrainment flow. At 50 per cent relative humidity this would be equivalent of roughly 25 L/min dry line oxygen and intrainment, requiring 0.99 cc/min. humidity to 100 per cent at body temperature. 0.33 cc is actually delivered by the machine. At 12 L/min this would be 1.32 cc/min. At 12 L/min. actual nebulization is 0.42 cc/min, at 14 L/min it would take 1.67 cc/min. The nebulizer output is 0.50 cc/min.

The daily oxygen consumption to operate this machine is 10 L/min, 600 L/hr.; 14,400 L/day. At 12 L/min consumption is 720 L/hr. and 17,280 L/day; at 14 L/min., 840 L/hr., and 20,160 L/24 hours.

The Retec produces a type I rather than a type III-mask pressure curve. It exists exhaled air through the machine, rather than by-passing on exhalation. It takes excessive patient effort to turn it on. Pressure and flow are not controlled separately.

Reach To Recovery

William A. Maddox, M.D.

Medical Advisor, Reach to Recovery

The Alabama Division of the American Cancer Society has recently coordinated the establishment of a state-wide rehabilitation program for women who have had mastectomy for breast cancer. This program—Reach to Recovery—is designed to help these women meet their psychological, physical and cosmetic needs after surgery.

Women are eager for such help. A woman would be better adjusted and have a more positive view of her self if she had had the help of such a program soon after her operation.

Upon authorization of the attending physician, a Reach to Recovery volunteer will visit the patient in the hospital. At this time the volunteer leaves a booklet with the patient and information on the following:

1—Reach to Recovery Kit: ball, book, rope and a temporary prosthesis.

2—Explanation and demonstration of the exercises prescribed.

3—Suggestions for bra comfort.

4—Explanation of various breast forms.

5—Suggestions for clothing adjustment.

6—Where indicated, a discussion of personal problems.

7—The volunteer's home phone number is left with the patient, with the understanding that, if the need arises, help is always available.

To ensure consistency in this program, a Program Coordinator has been thoroughly trained for each area of the state. These Area Coordinators are as follows:

Montgomery Area—Mrs. Paul Robinson—272-8953

Huntsville Area—Mrs. Naomi Fleenor—881-2630

Anniston Area—Mrs. Irena McElroy—236-4882

Mobile Area—Mrs. Bernard Brooks—342-6264

Each volunteer has been approved by her surgeon and/or internist to be emotionally and physically capable of rendering this service in her community. All of these ladies have had mastectomies themselves, and all realize the importance of such a program.

Alabama physicians may have this service for their patients by contacting the Coordinator for the respective area.

Hobbies To Fill A Doctor's Leisure

Arab Doctor and Lady, Bridge Club Champions

Of the fifty million people in the world now playing contract bridge, 32 (or eight tables) of them comprise a duplicate bridge club in the Alabama town of Arab—A-rab, pronounced ay (as in hay) rab (to rhyme with cab).

That fifty-million figure is no idle guess, but the now 12-year-old approximation is in Goren's Hoyle Encyclopedia of Games, published in 1960 by Hawthorn. Presumably it has grown well beyond that total in the dozen years intervening.

Arab has grown too and its population has reached, by a process of natural accretion and extended city-limits signs, the astonishing total of 6,000 men, women and children. And of the 32 who meet at the Arab Country Club each Monday night to vie for honors, the championship team for the last two years is composed of an M. D. and his wife.

Ellis Fay Porch was born in Union Grove, Marshall County on Wednesday, 15 November 1922, the son of Ludie (Monk) and John Ellis Porch. After finishing junior high at Union Grove and high school at Arab, young Porch went through UAB Medical College, from which he was graduated with his M. D. degree in 1953.

He is married to the former Wynona Parker, and they have three children: Ellis F. Jr., a University of Alabama junior at Tuscaloosa; Sandra, a Sophomore at Samford, Birmingham; and Christy Lynn, a 5th grader in Arab Elementary School.

An Army Air Corps pilot in World War II, he flew 40 combat missions in the South Pacific, receiving the Distinguished Service Cross and the Air Medal with five clusters.

Dr. Porch is a member of the Arab First Baptist Church, on the staff of Arab Hospital, Guntersville Hospital and Cullman Hospital; on the Board of Directors of Security Bank and Trust; and a member of the Board of Directors of Alabama's Medical Political Action Committee.

He is a member of the Marshall County Medical Society; the Medical Association of the State of Alabama; American Medical Association; Southern Medical Association; Alabama Academy of General Practice; Tennessee Valley General Practice Academy; Hypnosis Foundation, Life Fellow; Alpha Epsilon Delta Honorary pre-med society; Phi Chi Medical fraternity; a former member, Board of Trustees, MASA; member, Committee on the Medical Aspects of Sports of MASA; member, Educational and Athletic Scholarship program, University of Alabama; team physician, Arab High School football team; charter member, Arab Jaycees; Arab Lions Club; Arab P. T. A., Arab Masonic Lodge, and Cahaba Temple, Huntsville.

In addition to bridge, Dr. Porch lists his special interests as football (high school and college), team physician, and golf.

And here is no pastime. It qualifies much more readily, admits Mr. Goren, "as a hobby and as a science." And members of Arab's duplicate bridge fraternity, including the club champions, Dr. and Mrs. Porch, often enter tournaments in nearby towns—in Gadsden, Huntsville, and Birmingham.

—W. J. M., Jr.



BECAUSE ALLERGIES ARE A YEAR-ROUND THING.

[illegible] and allergies don't follow the calendar. That's why it's good to remember Novahistine LP. A prescription decongestant antihistamine, its convenient twice-every-12-hours dosage can usually give your patients all-day, all-night relief year-round from nasal congestion due to allergies.

And it's available only on your prescription for adults and children over 12.

NOVAHISTINE® LP decongestant

DOW PHARMACEUTICALS
The Dow Chemical Company
[illegible]

Femininity & Vaginitis



Many women still believe that a douche is a cure-all for vaginal secretions and malodor. Mother tells daughter and the myth is perpetuated.

Other cosmetic products are not much better. Though they may be effective in some minor infections, they cannot touch the real medical problem, which very often is trichomonal vaginitis.

Medicine's most effective cure for trichomonal vaginitis is Flagyl® (metronidazole). It is also pleasantly feminine because it provides the simplicity of oral medication . . . frees women from the unpleasant mess and bother of douches.

When the problem is trichomonal vaginitis . . . remember Flagyl. It cures trichomoniasis with an unmatched high degree of effectiveness.

Flagyl is indicated for the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture.



Flagyl®

brand of (metronidazole)



Indications: For the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture. The oral form is indicated also for intestinal amebiasis and amebic liver abscess.

Contraindications: Evidence or history of blood dyscrasia, active organic disease of the CNS, the first trimester of pregnancy and a history of hypersensitivity to metronidazole.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to those pregnant patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. Exacerbation of moniliasis may occur. In amebic liver abscess, aspirate pus during metronidazole therapy.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified. Flattening of the T wave may be seen in EKG tracings.

Dosage and Administration

For Trichomoniasis. In the Female: One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during, and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used,* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male:* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

For Amebiasis. Adults: For acute intestinal amebiasis, 750 mg. orally three times daily for 5 to 10 days. For amebic liver abscess, 500 to 750 mg. orally three times daily for 5 to 10 days.

Children: 35 to 50 mg./kg. of body weight/24 hours, divided into three doses, orally for ten days.

Dosage forms: Oral tablets 250 mg.
Vaginal inserts 500 mg.

Flagyl® (metronidazole)

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LIQUID MYLANTA®-II
GREATER NEUTRALIZING IMPACT
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An all new homelike open psychiatric residence on a lovely five-acre tract, centrally located within the community, providing a comprehensive range of continuous services, including in-patient, day care, and outpatient treatment. Each patient participates in an extensive and intensive treatment program, based almost exclusively upon multiple psychotherapeutic encounters. These include individual psychotherapy, group psychotherapy, the nursing milieu, occupational therapy, recreational therapy, topical small group discussions, and other group activities in the Center, as well as in the community, depending on individual needs and interests. Medications are prescribed when appropriate.

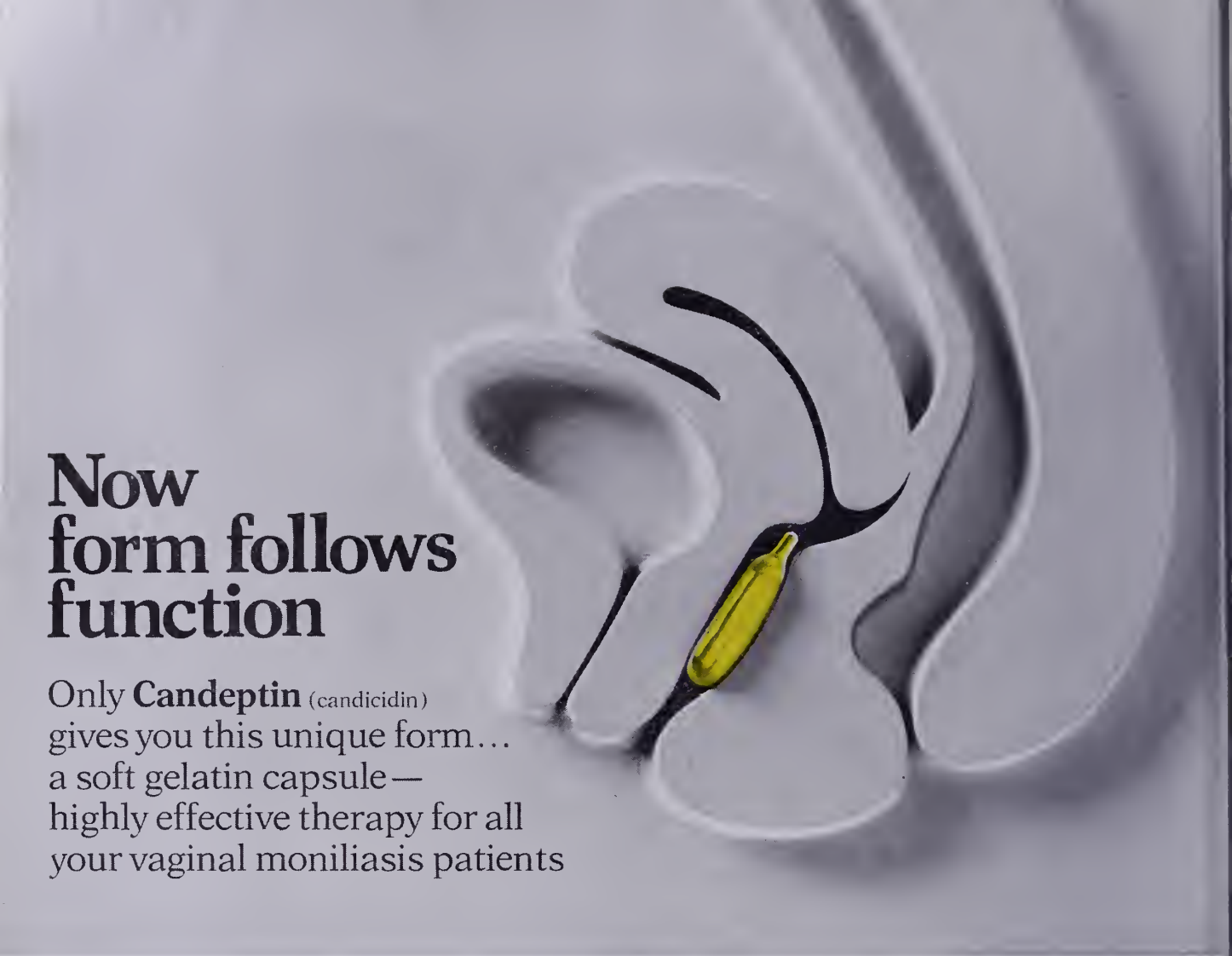
Any individual may be admitted who, in the opinion of the medical staff, might benefit from the services provided in this particular setting. This can best be determined by a preadmission consultation with the person and a responsible family member.

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Now form follows function

Only **Candeptin** (candicidin) gives you this unique form... a soft gelatin capsule— highly effective therapy for all your vaginal moniliasis patients

CANDEPTIN® (candicidin) VAGELETTES™ Vaginal Capsules...a unique dosage form... anatomically and therapeutically designed to extend flexibility in the treatment of vaginal moniliasis.

Virtually unlimited application
CANDEPTIN VAGELETTES Vaginal Capsules provide the specific high potency antimonilial agent, candicidin, in a soft gelatin capsule—the shape designed with your patient in mind. It permits easy manual insertion without the need for an applicator or inserter...of particular value for the pregnant patient...for *intravaginal use*. By cutting off the tip of the narrow soft end, the contents can be extruded through an intact hymen for *intravaginal use*. And it is readily adaptable to *topical application* for labial involvement, and/or *intravaginal use* to treat mucosal infection.

CANDEPTIN (candicidin) provides:
Rapid results
Prompt, symptomatic relief—itching, burning, and discharge subside in 48-72 hours!
Soothing, miscible ointment permits complete contact with affected tissue.
Usually cures in a single 14-day course of therapy.[2,3,4]

Safe
Exact dosage assured.[2,3]
No side effects, clinical reports of irritation or sensitization extremely rare.

Convenience
Easy to use intravaginally and/or topically for labial involvement.
Encourages patient acceptance and cooperation.
Therapy is easy to start in your office.

Clinical proof of potency
CANDEPTIN (candicidin) is significantly more potent *in vitro* than nystatin.[5] CANDEPTIN Vaginal Ointment and Tablets have a clinical record of cure rates of 90% and more in pregnant and non-pregnant patients.[1,4,6] In recent studies on CANDEPTIN VAGELETTES Vaginal Capsules, involving both gravid and non-gravid patients, a 100% culture-confirmed cure rate was achieved with a single 14-day course of therapy.[2,3]

Unique CANDEPTIN® (candicidin) VAGELETTES™ Vaginal Capsules

Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)

Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: **1.** Olsen, J.R.: Journal-Lancet *85*:287 (July) 1965. **2.** Giorlando, S.W.: Ob/Gyn Dig. *13*:32 (Sept.) 1971. **3.** Decker, A.: Case Reports on File, Medical Department, Julius Schmid. **4.** Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*: 370 (Oct. 1) 1964. **5.** Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. **6.** Friedel, H.J.: Maryland M.J., *15*:36 (Feb.) 1966.

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CANDEPTIN®
(candicidin)
Vaginal Tablets
Vaginal Ointment
and VAGELETTES™
Vaginal Capsules

(Continued from Page 894)

Tidwell, Owen K., LaGrange, Georgia, Moved from State.

Macon County

McRae, Luther C., Jr., Tuskegee, Alabama, Transfer to Nonmember.

Madison County

Bercaw, Beauregard L., Huntsville, Alabama, Transfer to Nonmember.

Moore, Lewis W., Chattanooga, Tennessee, Moved from State.

Morgan County

Blanton, Harold L., Waverly, Tennessee, Moved from State.

Hawkins, Rowland Speck, Houston, Texas, Moved from State.

Mack, Robert L., Jr., Plano, Texas, Moved from State.

Nash, James C., Jr., Mount Vernon, Alabama, Transfer to Nonmember.

CHANGES OF ADDRESS

Baldwin County

Howard, Percy J., present Fairhope to P. O. Box 509, 306 South Greeno Road, Fairhope, Alabama 36532.

Mullins, Henry C., Jr., present Fairhope to P. O. Box 509, 317 Magnolia Avenue, Fairhope, Alabama 36532.

Chambers County

Carpenter, Arthur E., Jr., present Lanett to Valley Medical Group, Langdale, Alabama 36864.

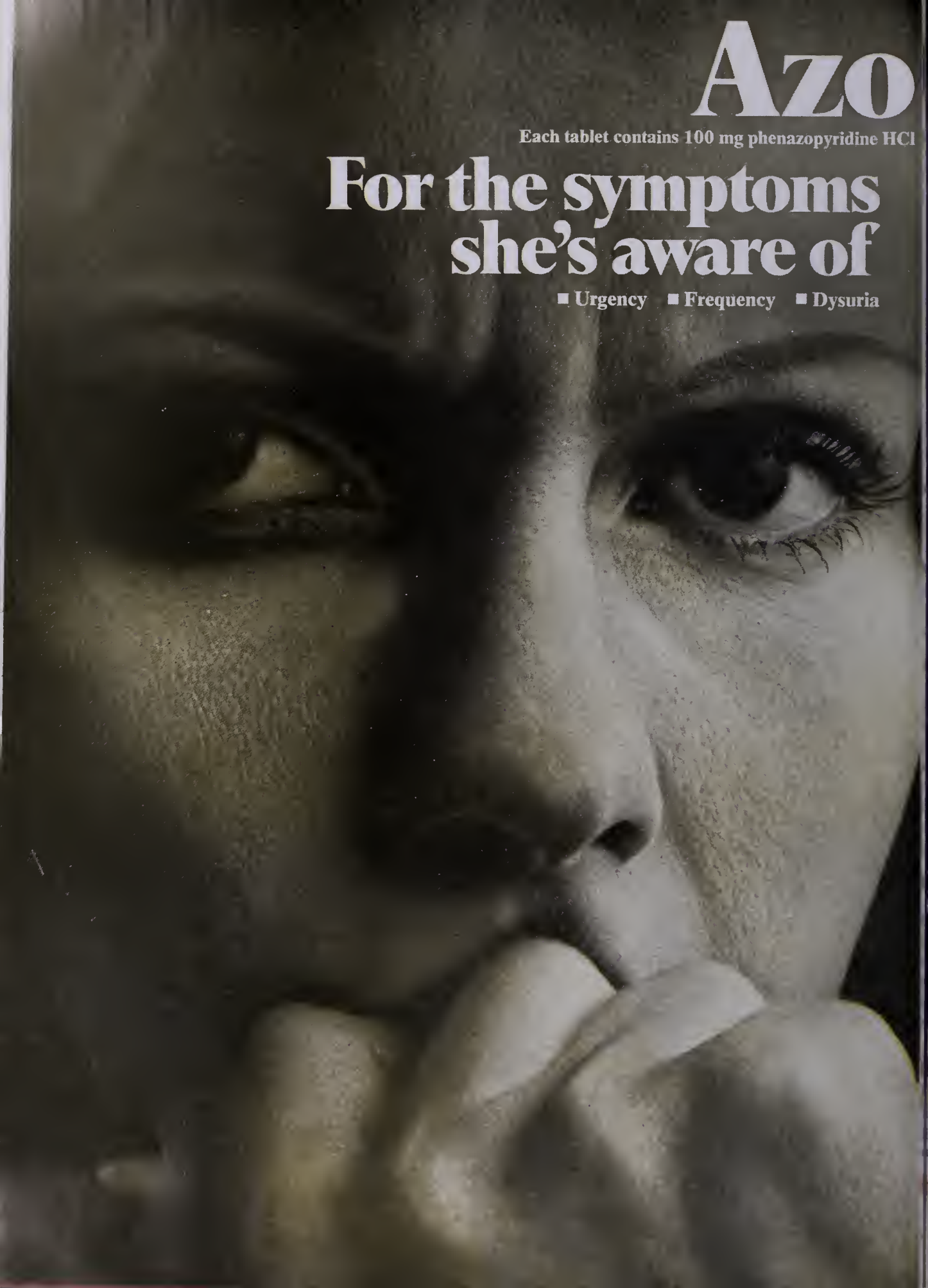
Coffee County

Grimes, James T., present Enterprise to 1506 West College Avenue, P. O. Box 810, Enterprise, Alabama 36330.

Colbert County

Campbell, Robert E., present Aberdeen, South Dakota to Box 130, Sheffield, Alabama 35660.

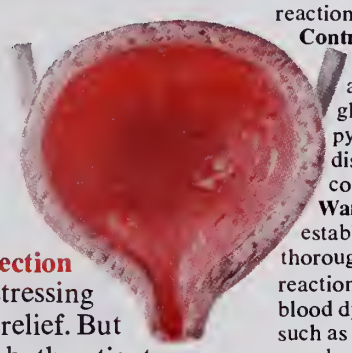
(Continued on Page 918)


Azo
Each tablet contains 100 mg phenazopyridine HCl
For the symptoms she's aware of
■ Urgency ■ Frequency ■ Dysuria

Gantanol®

nd 0.5 Gm sulfamethoxazole.

For the infection you're aware of



ecisive dual action relieves symptoms, controls infection

Urgency, frequency, dysuria—these are the distressing mptoms of cystitis for which she wants immediate relief. But apid control of the infection is equally important to both patient id physician. This is the situation that demands dual-action Azo antanol: the analgesic action of Azo (phenazopyridine HCl) for apid relief of pain, the antibacterial action of Gantanol® ulfamethoxazole) to control the bladder infection.

apid antibacterial action/around-the-clock coverage

In from 2 to 3 hours after the initial 2-Gm adult dose of zo Gantanol, therapeutic blood and urine levels begin to control isceptible *E. coli* as well as susceptible gram-negative and am-positive pathogens. Subsequent b.i.d. doses maintain anti-acterial levels throughout a 24-hour period—especially important help control bacterial build-up in urine retained during sleeping ours. The usual precautions in sulfonamide therapy, including aintenance of adequate fluid intake, should be observed. The ost common side effects are nausea, vomiting and diarrhea.

he'll feel better while she gets better

As the antibacterial action of Gantanol begins to control the fection, the analgesic action of the Azo component starts relieving e symptoms associated with her infected, inflamed and irritated adder. In acute, nonobstructed cystitis—when rapid relief of mptoms and early control of infection are essential—prescribe zo Gantanol, the basic therapy that helps your patient feel tter while she gets better.

n acute painful nonobstructed cystitis

Azo Gantanol®

ach tablet contains 0.5 Gm sulfamethoxazole id 100 mg phenazopyridine HCl.

asic therapy

ROCHE

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis, a frequently dose-related reaction, may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infection is 4 tablets initially, then 2 tablets morning and evening. If pain persists beyond seven days, causes other than infection should be sought. After relief has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl, bottles of 100 and 500.

When you prescribed Orinase®

(tolbutamide, Upjohn)

14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures necessary for optimal control with insulin are also necessary with Orinase. The patient on Orinase must be fully instructed: about the nature of his disease; how to prevent and detect complications; how to control his condition; not to neglect dietary restrictions, develop a careless attitude or disregard instructions relative to body weight, exercise, personal hygiene, and avoidance of infection; how to recognize and counteract impending hypoglycemia; how and when to test for glycosuria and ketonuria; how to use insulin; and to report to the physician immediately if he does not feel as well as usual.

Caution, very close observation, and careful adjustment of dose are necessary when: insulin is withdrawn during the trial period in order to avoid ketosis, acidosis, and coma; thiazide diuretics are administered which may result in aggravation of diabetic state and increased tolbutamide requirement, temporary loss of control, or even secondary failure; treating patients with impaired hepatic and/or renal function and debilitated, malnourished, or semistarved patients in order to avoid severe hypoglycemia which may require corrective therapy over several days; and treating patients with severe trauma, infection, or surgical procedures where temporary return to insulin or addition of insulin may be necessary. Response to tolbutamide is diminished in patients receiving therapy with beta blocking agents.

As some diabetics are not suitable candidates, it is essential that the physician familiarize himself with the indications, limits of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, and during the initial test period should communicate with the physi-

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(tolbutamide, Upjohn)

cian daily, and during the first month report at least once weekly for physical examination and definitive evaluation. After a month, examinations are recommended monthly or as indicated. Appearance of ketonuria, increase in glycosuria, unsatisfactory lowering or persistent elevation of blood sugar, or failure to obtain and hold clinical improvement indicate nonresponsiveness to Orinase (tolbutamide). Orinase does not obviate need for maintaining standard diet regulation. Uncooperative patients should be considered unsuitable for therapy. Prescriptions should be refilled only on specific instruction of physician. In treating mild asymptomatic diabetic patients with abnormal glucose tolerance, glucose tolerance tests should be obtained at three- to six-month intervals. Orinase is not an oral insulin or a substitute for insulin and must not be used as sole therapy in juvenile diabetes or in diabetes complicated by acidosis or coma where insulin is indispensable.

If phenformin is prescribed in combination with Orinase, appropriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, may occur and may mimic acute neurologic disorders such as cerebral thrombosis. Certain factors such as hepatic and renal disease, malnutrition, advanced age, alcohol ingestion, and adrenal and pituitary insufficiency may predispose to hypoglycemia and certain drugs such as insulin, phenformin, sulfonamides, oxyphenbutazone, salicylates, probenecid, monamine oxidase inhibitors, phenylbutazone, bishydroxycoumarin, and phenyramidol may prolong or enhance the action of Orinase and increase risk of hypoglycemia. Orinase long-term therapy has been reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: *0.5 g. Tablets*—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

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(Continued from Page 913)

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Sanders, Joe D., present Red Level to Andalusia Medical Center, Andalusia, Alabama 36420.

Terrell, Dudley J., present Enterprise to Mizell Memorial Hospital, Opp, Alabama 36467.

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Field, Mason D., Jr., present Dothan to 509 West Main Street, Dothan, Alabama 36301.

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Bolding, O. Thomas, present Birmingham to Medical Towers, 1717-11th Avenue South, Birmingham, Alabama 35205.

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(Continued on Page 923)

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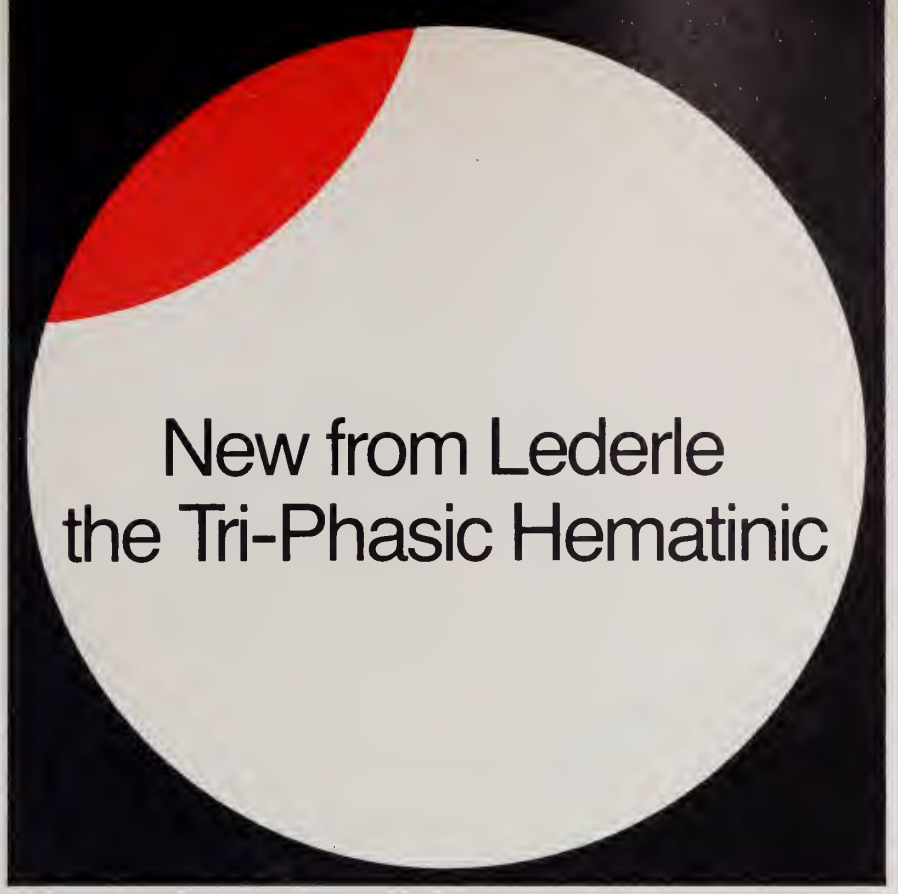
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(Continued on Page 929)

"The history of science, and in particular the history of medicine . . . is . . . the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

– George Sarton, from "The History of Medicine Versus the History of Art"

Should nongovernment scientists and physicians play a role in drug regulation?

Opinion

Results of a questionnaire to 7000 physicians:

82.8%
Physicians should play a role

78.3%
Independent scientists should play a role

69.8%
Medical academicians should play a role

Opinion & Dialogue

Dialog

Should nongovernment scientists and physicians play a role in drug regulation?

Doctor of Medicine

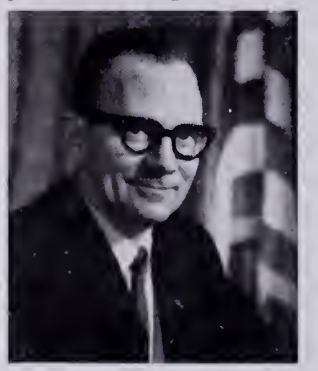
Herbert L. Ley, Jr., M.D., M.P.H., Formerly Commissioner, F.D.A. (1968-1969) Currently Medical Consultant

In order for drug regulation to be effective, participation in the regulatory process from nongovernment physicians and scientists must be encouraged. Without such involvement, there will continue to be a high degree of controversy surrounding any regulations promulgated by the Food and Drug Administration.

There are two areas in which participation and communication by nongovernment physicians and scientists could significantly improve the process of regulation. First, scientists and physicians throughout the country could become involved in consulting relationships with the Food and Drug Administration in important scientific areas while regulatory policies are being evolved. If nongovernment professionals could bring their expertise and experience to bear early in the decision-making process, they would have less reason to criticize the final outcome.

Secondly, practicing physicians, academic physicians, and academic-based scientists could make it their business to comment on proposed regulations appearing in the Federal Register. Ideally, a system could be instituted whereby medical, scientific and technical people could see the Federal Register regularly, and provide the Food and Drug Administration with a body of opinion that has so far gone unheard. The FDA is caught among pressures from industry, Congress, the Presidential Administration and consumers. It should also feel pressures from practicing physicians and scientists.

In order to become more involved in these stages of the drug regulatory process, nongovernment physicians and scientists should begin to exercise their influence through their respective professional organizations,



state and national medical societies, and specialty groups. Logically, a letter from these organizations representing a collective opinion has far greater weight in the regulatory process than individual letters. If the Food and Drug Administration receives opinions from these organizations early, before a regulation gets into the Federal Register, they are in a good position to respond with further study and review. Without such dissenting opinions, there is very little incentive to make changes in proposed regulations.

One instance in which practitioners did influence drug regulatory affairs in this way is the recent controversy that arose over the legitimacy of drug combinations. The strong opinion of practitioners on the value of such medication in clinical practice played a very prominent role in making the Food and Drug Administration modify its rather restrictive policy.

Another way in which practitioners can effectively influence drug regulations is by working with drug manufacturers conducting clinical trials of chemotherapeutic agents. When a drug is rated other than effective it may only mean that there is a lack of controlled clinical evidence as to efficacy. Thus, physicians might offer to conduct clinical studies that could help keep a truly effective drug in the marketplace. The treatment of diseases such as diabetes and angina are areas where the practitioner can aid in clinical studies because patients suffering from these diseases are rarely found in the conventional hospital setting.

By working with ethically and scientifically sound study designs in his everyday practice, the practitioner could begin to play an important part in determining official ratings on drug efficacy.

Nongovernment physicians and scientists and the FDA should also improve their lines of communication to the public. The medical community must develop a voice every bit as loud as that of the consumerists, the press, and others who sometimes criticize without complete information. If not, much of what the medical community *and* federal regulators do will often be represented in simplistic and somewhat misleading terms.

One illustration of the misuse of the media in this regard is the recall of anticoagulant drugs several years ago. This FDA action was given publicity by the press and television that went far beyond its probable importance. The result was a very uncomfortable situation for the practitioner who had patients taking these medications. Since the practitioner and pharmacist had not been informed of the action by the time it was publicized, in most states they were deluged with calls from worried patients.

The practitioner can attempt to solve these problems of inadequate communication in several ways. One would be the creation of a communications line in state pharmacy societies. When drug regulation news is to be announced, the society could immediately distribute a message to every pharmacist in the state. The pharmacist, in turn, could notify the physicians in his local community so that he and the physician could be prepared to answer inquiries from patients. Another approach would be to use professional publications the practitioner receives.

All of this leads back to my opening contention: if drug regulation is to be effective, timely, and related to the realities of clinical practice, a better method of communication and feedback must be developed between the nongovernmental medical and scientific communities and the regulatory agency.

ue

Maker of Medicine

Henry W. Gadsden, Chairman & Chief Executive Officer, Merck & Co., Inc.



In my opinion, it is the responsibility of all physicians and medical scientists to take whatever steps they think are desirable in a law- and regulation-making process that can have far-reaching impact on the practice of medicine. Yet many events in the recent past indicate that this is not happening. For example, it is apparent from drug efficacy studies that the NAS/NRC panels gave little consideration to the evidence that could have been provided by practicing physicians.

There are several current developments that should increase the concern of practicing physicians about drug regulatory affairs. One is the proliferation of malpractice claims and litigation. Another is the effort by government to establish the relative efficacy of drugs. This implies that if a physician prescribes a drug other than the "established" drug of choice, he may be accused of practicing something less than first-class medicine. It would come perilously close to federal direction of how medicine should be practiced.

In order to minimize this kind of arbitrary federal action, a way must be found to give practitioners both voice and representation in government affairs. Government must be caused to recognize the essentiality of seeking their views. One of the difficulties today, however, is that there is no way for concerned practitioners to participate in the early stages of decision-making processes. They usually don't hear about regulations until a proposal appears in the Federal Register, if then. By that time a lot of concrete has been poured, and a lot of boots are in the concrete.

Physicians in private practice, and particularly clinicians, should press for representation on the advisory committees of the Food and Drug Administration, joining with academic and teaching hospital physicians and scientists who are already serving. Though practitioners may not have access to all available information, the value of their clinical experience should be recognized. Clinicians, for example, rightly remind us that difficulty in *proving* precise effects does not necessarily mean a drug is ineffective.

Unless practitioners are more involved in drug regulations, it will be increasingly difficult for the pharmaceutical industry and scientists elsewhere to make optimal progress in drug development. The benefit/risk ratio must be re-emphasized, and as part of this it must be acknowledged that benefit can come from the judgments of medical science as a whole. Even this concept, unfortunately, is not always accepted in drug regulatory processes. For example, if current medical opinion holds that an excess of total lipids and cholesterol in the blood is probably predisposing to atherosclerosis, and if a drug is discovered which reduces total lipids and cholesterol, the drug ought to be accepted *prima facie* as a contribution to medical science . . . until someone disproves the theory. The sponsor should not have to prove the theory as well as to develop and test the drug.

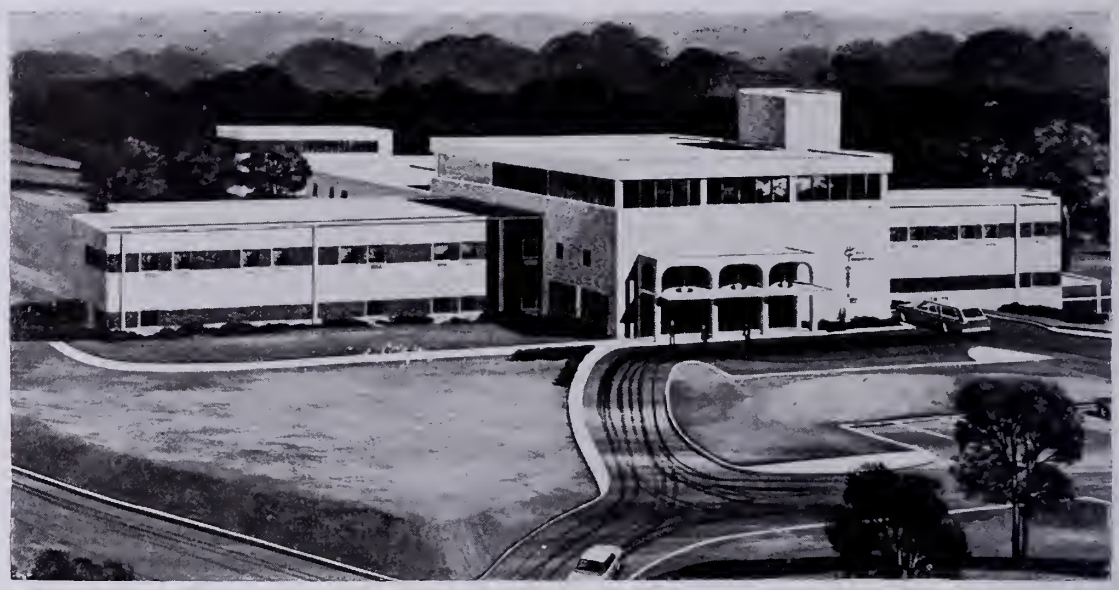
I feel a major new effort must also be made to erase the feeling of mistrust of medicine and of medicines that seems to be growing in the public consciousness. Triggered primarily by strident announcements in Washington, people are reading and hearing confidence-shaking things almost continuously. Although challenge and awareness are essential to medical advancement, our long-term goal is constructively to build, not destroy. This means strengthening patient-physician relationships based on mutual confidence and trust. And in matters of health policy, it means working toward participatory rather than adversary proceedings—where everyone with an interest and a capacity to contribute has an opportunity to be heard . . . and, if that opportunity is not spontaneously afforded him, he may seek it.

Opinion & Dialogue

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Yake, R. F., Jefferson 933-2106
Younger, J. B., Sr., Jefferson 934-5631

MEMBERS TRANSFERRED

Escambia County

Stevens, Johnnie W., 211-7th Avenue, Atmore, Alabama 36502, from member Blount County Medical Society to member of Escambia County Medical Society. GP.

Houston County

Miller, A. Lamar, Jr., 211 West Main Street, Dothan, Alabama 36301, from member Jefferson County Medical Society to member of Houston County Medical Society. U.

Jefferson County

Alphin, Thomas H., 1919 South 7th Avenue, Birmingham, Alabama 35233, from member Montgomery County Medical Society to member of Jefferson County Medical Society. PH.

Browne, William C., 1717-11th Avenue South, Birmingham, Alabama 35205, from member Shelby County Medical Society to member of Jefferson County Medical Society. GP.

Madison County

Abele, Henry B., 401 Lowell Drive, Huntsville, Alabama 35801, from member Jefferson County Medical Society to member of Madison County Medical Society. P.N.

Goldstein, Richard P., 930 Franklin Street, S. E., Huntsville, Alabama 35801, from member Jefferson County Medical Society to member of Madison County Medical Society. ObG.

ADD SPECIALTY

Jefferson County

Riederer, Robert E., 1500-6th Avenue South, Box 3387-A, Birmingham, Alabama 35205. GP.

CHANGE OF SPECIALTY

Calhoun County

Alig, Robert C., 411 East 9th Street, Anniston, Alabama 36201. ObG.

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All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

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First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

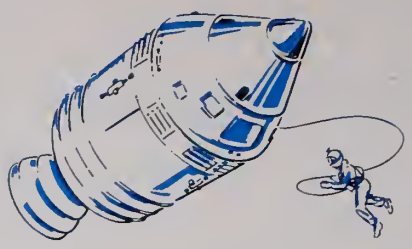
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A counterpart for Mudrane-2

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Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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Manufacturers of Ethical Pharmaceuticals

AMA To Co-Sponsor Medical Tour In Israel

CHICAGO—The American Medical Association will co-sponsor with the three principal medical institutions in Israel a 1973 medical conference in Tel Aviv.

Open only to AMA members, their families and guests, the 14-day trip, with 13 days in Israel, will include scientific presentations by leading Israeli authorities as well as visits to medical schools and other medical and research facilities.

Included will be several receptions, ceremonies, and a series of planned excursions to places such as Negev, Beersheba, Massada, Jerusalem, Bethlehem, Jericho, Galilee, Nazareth, Tiberias, Safed, Kibbutz, Nof Ginossar and, of course, Tel Aviv. There will be women's programs, including style shows, while the scientific meetings are in session.

The undertaking is a part of AMA's continued interest in the area of international health and marks the first attempt at co-sponsoring a formal meeting abroad.

Albert B. Sabin, M. D., of U. S. polio vaccine fame and currently president of the Weizmann Institute of Science in Tel Aviv, is the guest host. Also participating in the scientific portion of the program are the Hebrew University—Hadassah Medical School of Jerusalem and the Tel Aviv University Medical School.

Tour participants are scheduled to leave the U. S. Feb. 21, 1973, arriving in Tel Aviv the following day. Departure from Israel will be March 6. Registration for AMA members is $50.00 and $25.00 for relatives and physician guests. This will include the scientific meetings, a concert by the Irsael Philharmonic Orchestra, and other special features.

Each of the three local host institutions will arrange one day of scientific presentations for the participants.

The Weizmann Institute will offer presentations in the area of cancer research and special research being conducted which is of special medical significance.

Presentations on hypertension, treatment of mental diseases, heart disease, and progress in heart valve replacement will be given by the staff of Tel Aviv University Medical School.

Many of the socio-economics of Israel including medical care, medical education, manpower, community medicine, and Israel's contribution to International Health will be offered by the Hebrew University—Hadassah Medical School.

Subscriptions to the tour will be limited by the availability of hotel space in Tel Aviv.

Group travel arrangements are being coordinated by the Sentinel Travel Bureau of Chicago. Round trip group-fare New York to Israel and return will be $873.00 to $945.00, depending on hotel selection and the number of other stop-overs in Europe. The package includes the various excursions scheduled in Israel and breakfast and dinner each day on the excursion. Group-fare reductions will also apply to tickets from home to New York and return. Special side tours can be arranged with the travel bureau for the time before or after the meetings in Israel.

Detailed program of the meetings in Israel can be obtained by writing to the Department of International Medicine, American Medical Association, 535 North Dearborn, Chicago, Illinois 60610.

Arrangements for special sight-seeing tours at group rates can be arranged directly with the Sentinel Travel Bureau, 400 East Randolph Street, Chicago, Illinois 60601.

Requests for registration for the medical meeting in Israel should be addressed to the Department of International Medicine, American Medical Association, 535 North Dearborn, Chicago, Illinois 60610, and be accompanied by your registration fee remittance ($50.00 per physician and $25.00 per accompanying relative or guest). Such registrants will then be contacted directly by the Sentinel Travel Bureau for specific travel arrangements.



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Fathers and Sons in Medicine



DR. C. N. LAVENDER



DR. C. B. LAVENDER



DR. B. N. LAVENDER

Four Alabama Doctors Named Lavender

Three physicians in two generations of Lavenders in Alabama were reduced to one last December with the death of 56-year-old Claude Wilson Lavender, M. D., of Decatur.

The lone survivor is Belton Neel Lavender, M. D., of Albertville, born 26 September 1913 at Geiger, Alabama, the eldest of four sons born to Maggie Mae (Neel) and Dr. Claud Belton Lavender.

Reared in Fairfield, Alabama, where he was graduated from Fairfield High School in 1929, he received premed education at Birmingham-Southern and Howard Colleges, graduating from the latter with his B. S. degree in 1934, Four years later he received his M. D. degree from the University of Tennessee Medical College, Memphis, and then interned at John Gaston Hospital, entering general practice in Albertville in 1940. He founded a small, 15-bed hospital which he owned and operated for 25 years.

Dr. Lavender is a member of the American Medical Association, the Medical Association of the State of Alabama, and the Marshall County Medical Society, a past president of the latter, and also a onetime member of its Board of Censors. He is a member of the Methodist Church and of the Albertville Rotary Club.

Married to the former Lucille Neely, there are two sons, a daughter, and one grandson.

Dr. Belton Neel Lavender lists first, among his three hobbies, golf. But his other two are not as generally shared by doctors over Alabama. Flying is a hobby in which a limited but suprising number of physicians participate. He has a private pilot's license with an instrument rating. He is almost unique in his third hobby: the breeding of purebred Charolais cattle.

A younger brother, Dr. Claude Wilson Lavender, Sr., died 13 December 1971 at Ochsner Foundation Hospital in New Orleans.

Born in 1915, also at Geiger, Alabama, this Dr. Lavender went to Howard College (now Samford University) from Fairfield High School, and was graduated with a degree in Pharmacy. He attended the University of Alabama for two years of pre-med work before going on to Northwestern University for his M. D. degree, received in 1941.

After internship, service in the Medical

(Continued on Page 938)

Literary Hemorrhoids

Mrs. S.R., 47, high school English teacher. A history of anorectal pain and burning of several years' duration. On and off weight reducing diets, the insufficient bulk of which has aggravated a chronic constipation problem. Subsequent straining at stool has precipitated an acute episode of internal-external hemorrhoids.

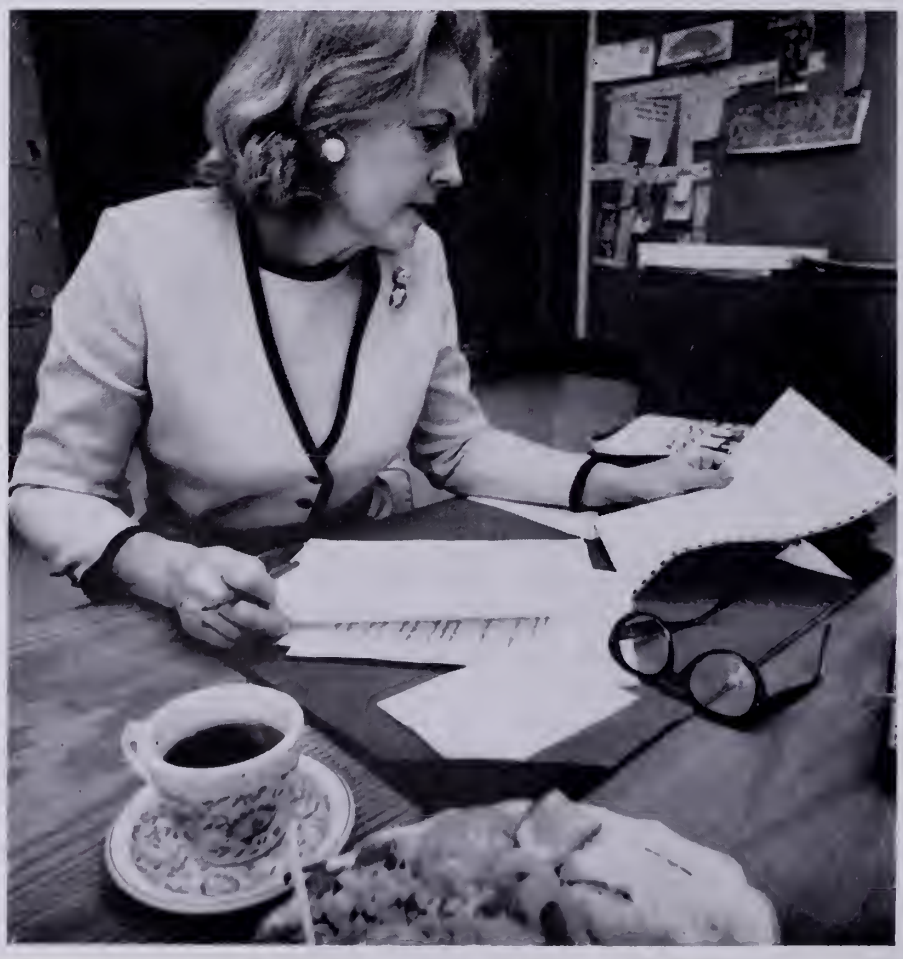


a typical proctological patient

to help relieve the pain, itching, burning associated with this and similar anorectal conditions

prescribe

Anusol-HC® hemorrhoidal suppositories with hydrocortisone acetate



Each suppository contains hydrocortisone acetate 10 mg, bismuth subgallate 2.25%, bismuth resorcin compound 1.75%, benzyl benzoate 1.2%, Peruvian balsam 1.8%, zinc oxide 11.0%, and boric acid 5.0%, plus the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

Precaution Prolonged or excessive use of Anusol-HC might produce systemic corticosteroid effects. Symptomatic relief should not delay definitive diagnosis or treatment.

Dosage and Administration Anusol-HC: One suppository in the morning and one at bedtime for 3 to 6 days or until the inflammation subsides. Regular Anusol: One suppository in the morning, one at bedtime, and one immediately following each evacuation.

And for long-term patient comfort...recommend Anusol® hemorrhoidal suppositories. Each suppository contains the ingredients of Anusol-HC without the hydrocortisone.

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Medical Director

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Member Georgia Hospital Association

(Continued from Page 935)

Corps in World War II, and before a residency in Urology at Baylor, Dr. Lavender went to Hartselle where he launched the Hartselle Hospital and served for ten years, moving to Decatur in 1958.

A past president of the Morgan County Medical Society, formerly chairman of the staff of Decatur General Hospital, Dr. Lavender's memberships included, in addition to AMA and MASA, the American College of Surgeons, Southeastern Section; the American Urological Association, and the Flying Physicians Association. He served as a member of the Tri-County Appalachian Regional Health Planning Commission. A past president of the Hartselle Rotary Club, he subsequently became a Decatur Rotarian.

Honorary pallbearers for his funeral included Dr. S. Britt Owens, Dr. Lawrence Ford, Dr. Sidney Chenault, Dr. Lawrence Jackson and members of the Morgan-Limestone Counties Medical Society.

Survivors include, in addition to his widow, the former Margie Miles of Crowley, Louisiana, to whom he was married in 1943, two sons, Claude Lavender, Jr., Hartselle; and Wesley Miles Lavender, Decatur; a daughter, Mrs. Robert Hunter, Jr., Decatur; his Mother, Mrs. C. B. Lavender, Hartselle; two grandchildren, Wendy Lavender and Robert T. Hunter III; and one other brother, William Lavender, of Riverside, California.

The father of the two Alabama doctors was the late Claud Belton Lavender, M. D., born at Ethelsville, Alabama in 1882, licensed to practice in Alabama in 1909, and graduating with his M. D. degree in 1910 from the University of Tennessee Medical College in Memphis.

The senior Dr. Lavender was in general practice in Pickens County, Alabama, until 1923, when he moved to Fairfield, in Jefferson County, to become physician for the T. C. I., remaining for 21 years.

Dr. Lavender practiced in Crossville, Ala., during World War II, moving to Hartselle in January 1949 to join his son, Dr. Claude Wilson Lavender in the operation of the Hartselle Hospital.

The senior Dr. Lavender died in Hartselle 30 January 1955.

Married in 1912 to Maggie Mae Neel of Beaville, Mississippi, who with one physician son survives him, he is also survived by three sisters, Mrs. Irene Clements of Eupora, Miss., Mrs. Helen Brandon, Columbus, Miss., Mrs. Gesna Goree, Mobile, Ala., and a brother, Newman Lavender, Columbus, Miss.

The senior Dr. Lavender was active in the First Methodist Church and the Hartselle Kiwanis Club. For a hobby he spent his spare time in his garden.

This family of physicians is related only distantly, if at all, to John Robert Lavender, M. D., late of Reform, Alabama. In the "Library of Alabama Lives," this Dr. Lavender is listed as a surgeon, born in Greensboro 18 March 1904. His name does not appear in the current Roster of the Medical Association of the State of Alabama.



PHYSICIAN PLACEMENT SERVICE IN ALABAMA

The Physician Placement Service of the Medical Association of the State of Alabama is designed to assist both physicians and communities. MASA members having knowledge of practice opportunities or wishing to relocate their own practices are urged to communicate with the Placement Service. For further information: write Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

Locations Wanted

General Practice—

Age 32; University of Texas, Southwestern, 1968; seeking institutional practice; Available January 1973. LW-3/3

Age 41; Temple University, 1963; National Board; Board eligible; seeking associate or group practice; Available December 1972. LW-3/4

Age 52; Marquette University, 1952; Board certified; seeking group, industrial, institutional or emergency room practice. LW-3/5

Internal Medicine—

Age 31; Medical College of Alabama, 1968; National Board; Available July 1972. LW-13/6

Age 29; Emory University School of Medicine, 1966; Board eligible, seeking group practice. Available July 1972. LW-4/5

Age 31; University of Miami, 1964; Board certified, seeking group or institutional practice. Available January 1973. LW-4/7

Age 31; University of Kentucky, 1966; seeking group practice; Board eligible; Available July 1972. LW-4/11

Age 31; Ohio State, 1965; Board certified; seeking group practice; Available July, 1972. LW-4/12

Age 29; National University of Mexico, 1966; seeking group or institutional practice; Available July 15, 1972. LW-4/13

Age 33; Cornell University, 1966; National Board; Board certified; seeking assistant or associate practice; Available January 4, 1972. LW-4/14

Obstetrics-Gynecology—

Age 49; Marquette University, 1945; Board certified; seeking institutional practice. LW-15/1

Age 57; Marquette University, 1943; Board certified; seeking industrial, institutional or clinical practice. LW-15/2

Ophthalmology—

Age 31; Chicago Medical School, 1966; National Board; seeking associate or group practice; Available July, 1973. LW-6/6

Age 32; State University of New York at Buffalo, 1966; National Board; seeking associate practice; Available July 1972. LW-6/7

Age 42; George Washington University, 1959; National Board; Board certified; seeking group or institutional practice; Available 1972. LW-6/8

Orthopedic Surgery—

Age 34; University of California, 1963; seeking group or associate practice. Available July 1972. LW-14/1

Age 31, Temple University, 1965; National Board; seeking group or associate practice. Available July 1972. LW-14/2

University of Illinois, 1965; National Board; seeking group or associate practice. Available July 1, 1972. LW-14/3

Age 31; University of Alabama, 1966; National Board; Available July, 1973. LW-14/4

Otolaryngology—

Age 32; Temple University, 1965; National Board; Board eligible; seeking solo or group practice; Available August 1972. LW-16/1

Age 32; Tulane University Medical School, 1965; Board certified; seeking solo, associate, or group practice; Available September 1, 1972. LW-16/2

Pathology—

Age 33; University of Texas, 1965; National Board; Board certified; seeking group or associate practice; Available September 1, 1972. LW-8/7

Age 32; Duke University, 1965; Board certified; seeking group practice; Available June, 1972. LW-8/9

Radiology—

Age 30; Medical College of Virginia, 1966; National Board, seeking solo or associate practice. Available June 1972. LW-10/4

Age 31; Medical College of Georgia, 1966; National Board; Board certified; seeking group practice; Available August 1, 1972. LW-10/6

Age 31; University of Iowa, 1966; seeking assistant or associate practice; Available October 1, 1972. LW-10/8

Age 32; Louisiana State, 1966; Available September 1, 1972. LW-10/9

Surgery—

Age 33; University of Maryland, 1965; seeking solo, group, or associate practice; Available July 1973. LW-11/7

(Continued on Page 944)

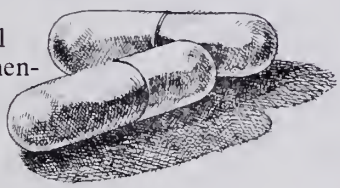
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A patient may blame his attacks of gastritis or duodenitis on "something he ate" but contributing factors may be his job, marital problems, financial worries or some other unmentioned source of stress and excessive anxiety that exacerbated the condition. Whether it is "something he ate" or "something eating him," adjunctive Librax can help. Librax offers both the antianxiety action of Librium® (chlordiazepoxide HCl), that can help relieve excessive anxiety, and the dependable anticholinergic action of Quarzan® (clidinium Br), that can help reduce gastrointestinal hypermotility and hypersecretion.



Patient-oriented dosage — up to 8 capsules daily in divided doses

For optimal response, dosage can be adjusted to suit patient needs—1 or 2 capsules, 3 or 4 times a day.

To help relieve anxiety-linked symptoms in gastritis and duodenitis

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Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

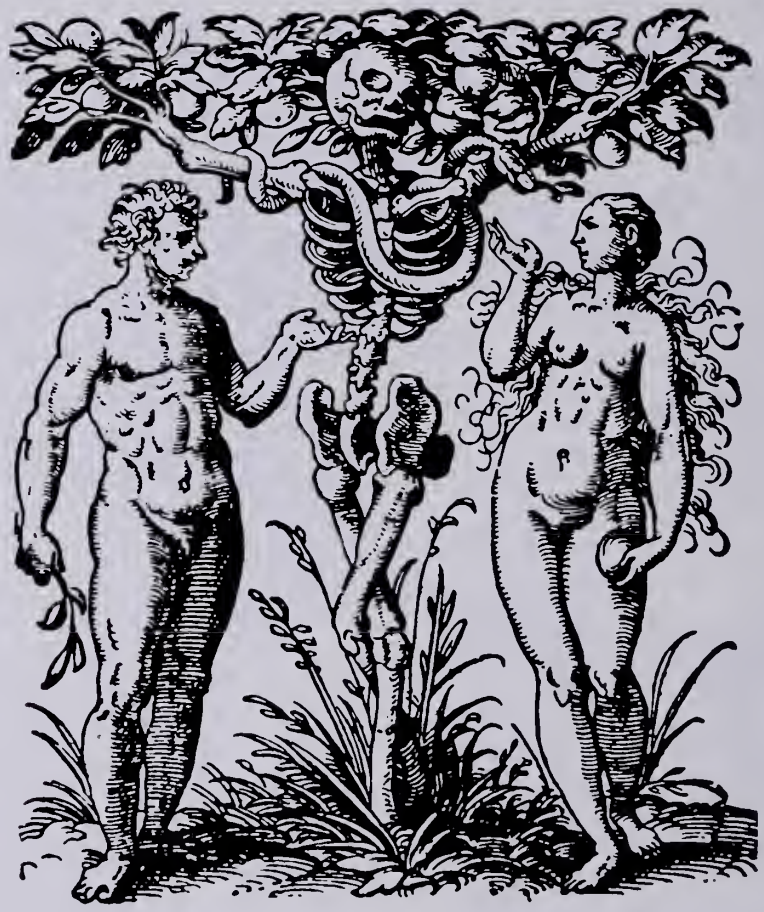
Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

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In acute gonorrhea

(urethritis, cervicitis, proctitis when due to susceptible strains of N. gonorrhoeae)



Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injections, 2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.
An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

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Warnings: Antibiotics used to treat gonorrhea may mask c delay the symptoms of incubating syphilis. Patients should b carefully examined and monthly serological follow-up for least 3 months should be instituted if the diagnosis of syphilis suspected.

Safety for use in infants, children and pregnant women has nc been established.

Precautions: The usual precautions should be observed wit atopic individuals. Clinical effectiveness should be monitored t detect evidence of development of resistance of *N. gonorrhoea*

Adverse reactions: The following reactions were observe during the single-dose clinical trials: soreness at the injection sit urticaria, dizziness, nausea, chills, fever and insomnia.
During multiple-dose subchronic tolerance studies in norm human volunteers, the following were noted: a decrease in hemc

Trobicin®

sterile spectinomycin dihydrochloride pentahydrate, Upjohn

single-dose intramuscular treatment

High cure rate:* 96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)**

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae in vitro (M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

Note: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

*Data compiled from reports of 14 investigators. **Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any pasitive culture obtained post-treatment was considered evidence of treatment failure even though the follaw-up period might have been less than the periods cited above under "criteria far cure" except when the investigator determined that reinfection through additional sexual cantacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as nan-evaluatable and were not included. JA72 1848-6

globin; hematocrit and creatinine clearance; elevation of alkaline phasphatase, BUN and SGPT. In single and multiple-dose studies in narmal volunteers, a reduction in urine output was noted. Extensive renal functian studies demonstrated no consistent changes indicative af renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitutian with diluent.
Male—single 2 gram dose (5 ml) intramuscularly. Patients with ganarrheal proctitis and patients being re-treated after failure of previaus antibiatic therapy shauld receive 4 grams (10 ml). In geographic areas where antibiatic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.
Female—single 4 gram dase (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams—with ampaule of Bacteriastatic Water far Injectian with Benzyl Alcahal 0.9% w/v.* Reconstitutian yields 5 and 10 ml respectively with a concentration of spectinamycin dihydrochlaride pentahydrate equivalent to 400 mg spectinamycin per ml. Far intramuscular use only.
Susceptibility Pawder—for testing *in vitra* susceptibility of *N. ganarrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A twa-gram injection praduces peak serum concentratians averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 haurs. A four-gram injectian produces peak serum concentrations averaging 160 mcg/ml at two haurs with 31 mcg/ml at 8 hours.
For additianal product information, see your Upjohn representative ar cansult the package insert. MED-B-1-S (LWB)

Upjohn The Upjahn Company, Kalamazoo, Michigan 49001

(Continued from Page 939)

Age 33; University of Tennessee, 1967; seeking practice in General Surgery. Available July 1972. LW-11/8

Age 48; Duke University, 1947; National Board; Board certified; seeking group practice in general surgery; Available July 1, 1972. LW-11/9

Age 39; Creighton University School of Medicine, 1957; National Board; Board certified; seeking associate or group practice; Available June, 1972. LW-11/10

Age 34; New York University School of Medicine, 1964; National Board; Board certified; seeking solo, associate, group or institutional practice; Available July 1, 1972. LW-11/12

Age 32; Medical College of Virginia, 1965; Board eligible; seeking associate or group practice; Available August, 1972. LW-11/13

Urology—

Age 34; Medical College of Georgia, 1967; seeking group or associate practice; Available July 1972. LW-12/1

Age 31; Northwestern University, 1965; seeking associate or group practice; Available July 1, 1972. LW-12/3

Age 36; Louisiana State University Medical School, 1961; Board eligible; seeking associate practice; Available December, 1972. LW-12/4

Physicians Wanted

Special Openings—

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Opportunity for Internist, Board Certified or eligible, interested in Cardiology, in town of 11,000 population—service area 40,000—south Alabama. Modern 86-Bed (JCAH) general hospital with 8-Bed Combination Intensive and Coronary Care Unit under construction. Seven GP's, Certified Surgeon, Radiologist—excellent city school system. PW-15

Internists—one or two needed in University town of 40,000 plus population in Southeast Alabama—Young vigorous multi-specialty group—Generous initial salary and early partnership. PW-16

Internists, Board-certified or eligible. One needed now and another in 1 or 2 years. For early partnership with internist in south Alabama city of 40,000 plus population. New office building adjacent to 181-bed hospital. Practice largely hospital in-patient and Cardiology. PW-21

Opportunity for a Board certified or eligible surgeon to be associated with a Board surgeon in city of 150,000 population. PW-21/1

General Practitioner or Internist for associate or separate practice in Birmingham. Modern office space and excellent hospital facilities. PW-26

Internist wanted, Board certified, Town of 10,000 population, Southwest Alabama. New 51-bed general hospital, I.C.U. Physicians: 5 GP's, Certified Surgeon and Radiologist. Within easy access, excellent fresh and salt water fishing, hunting including deer and turkey. Public and private schools. One hour drive from two metropolitan areas. PW-18

Wanted, internists, generalists, radiologist, orthopedist, general surgeons, town of 15,000 population in county of 45,000 population in southeast Alabama. Attractive for a group setup. High income area and marked scarcity of physicians. Excellent schools and recreational facilities. Newly expanded hospital. PW-17

Wanted: Immediately. Pediatrician to replace recently deceased partner in northeast Alabama. Enter busy practice in a predominantly GP area. Enjoy rural, quiet living with nearby scenic and recreational facilities. Salary, practice, everything negotiable. PW-19

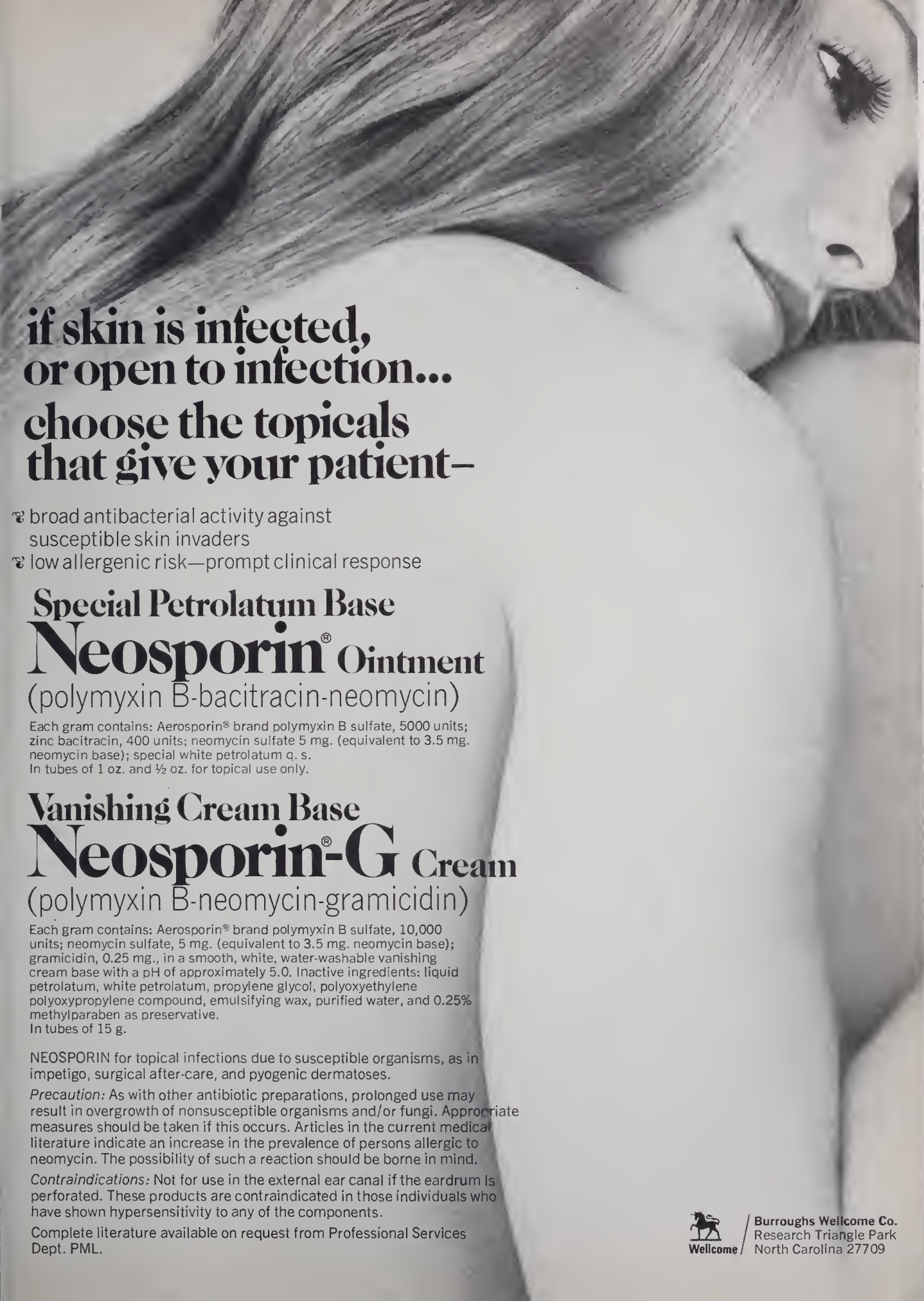
Physician wanted. Student Health Service, University of Alabama. Eight full-time physicians. New facility. Competitive salary. Liberal vacation. Excellent fringe benefits. PW-20

Wanted: General Practitioner or Internist to join active 4-M. D. professional association—3-GP's, 1 Board Surgeon. Modern offices, accredited 75 bed hospital. Beautiful town of 10,000 with excellent churches, schools (public and private). Salary for 3-6 months then arrangement for full partnership. PW-22

General Practitioners—

For town of 2,000 population located in trade area of 15,000 population in northeast Alabama. Nearest metropolitan centers 30 miles distance. Industrial area. Clinic and some office equipment available. Several churches, schools, and civic clubs. PW-23

Opportunity for GP to join well established four-man partnership; three general practitioners and one board certified surgeon. Practice located in city of 8,000 population, trade area of 60,000, north-central Alabama. Modern new partnership-owned offices adjacent to modern 125-bed fully accredited hospital. Salaried first year with possible partnership status at end of first year. PW-27



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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

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of the

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Volume 41 • June, 1972 • No. 12

Office of Publication
19 So. Jackson St. .... Montgomery, Ala. 36104
Subscription Price ..... $5.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly in Montgomery at 19 South Jackson Street.

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Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

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President's Page



DR. PHILLIPPI

Physicians Liability Insurance Program

Unless some unforseeable condition arises our Medical Association will begin its much awaited physicians liability insurance program on August first. At our Association's last Annual Session, the Counsellors and Delegates approved in principle the program submitted by Employers of Wausau. The administrative details of this program have now been agreed on.

This contractural agreement brings to a close an over three-year search by your Insurance Committee, Board of Trustees, and Board of Censors. It has entailed many meetings and prolonged discussions.

With Employers of Wausau we start with premium rates lower than any of the premium rates now being charged by the several different insurance companies supplying physicians liability insurance in this state. This is indeed a pleasant surprise to all concerned.

The company has agreed that there will be no increase in rates for 24 months following the effective date of this program. Thereafter the company and the Association shall annually agree on rates. The rate then will be determined solely on Alabama's experience.

We will have full financial disclosure. The program will be audited semi-annually by an independent actuarial firm of our choice.

We will have district peer review committees who will consider and screen those applicants who wish to subscribe to this program. Applicants who have had bad experience may unfortunately be excluded from the program. After all the program is designed for the benefit of the majority of our membership. Those applicants with bad or unfortunate experience will be considered individually and depending on the circumstances, these members may be allowed to enroll at the accepted rate structure or they may have to submit to surcharges. The experience of those individuals who unfortunately have experienced justifiable malpractice claims within the past three to five years will receive less consideration than those of longer duration.

Association peer review committees together with the company and with the involved member will decide the action to follow on each individual liability claim. It is felt that this will prevent many out-of-court settlements of unjustifiable claims.

This insurance company has not stipulated any required percentage on enrollment at the inception of this program. All other companies which your Association considered required that a certain percentage of the membership subscribe to the program at its inception. This company does reserve the right to withdraw from the program if it be

deemed necessary after rendering a 90 day notice if after three years it does not get the enrollment of 1500 members.

I do not feel that this will be any problem because of the competitive premium rate alone. Our present insurance commissioner has indicated that he will remove the freeze on applications now in his office for premium rate increases on physician liability insurance once our Association has begun its Association-sponsored program.

It is my understanding that all companies now supplying physician liability insurance in this state have applied for a rate increase and one company supplying liability insurance has applied for a one hundred per cent rate increase.

The Insurance Commissioner has been very helpful to the physicians of this state in delaying and curtailing physician liability insurance rate increases and he has saved the physicians of this state considerable money.

Employers of Wausau has agreed to establish a common anniversary date on all policies. Your Insurance Committee asked for this. All other companies interviewed seemed to balk but Employers of Wausau only replied when this was requested that they would do whatever the Association wanted in this respect.

I have been very favorably impressed with the representatives of this company who have been in this state during the past few weeks—with their sincerity and honesty. They have not been pressure salesmen.

I also believe that they are favorably impressed with the physicians of this state and with your state organization.

This is a very large company. They are involved in a similar program in New York State. We have learned that the Medical Society of the State of New York has been very well satisfied with this program.

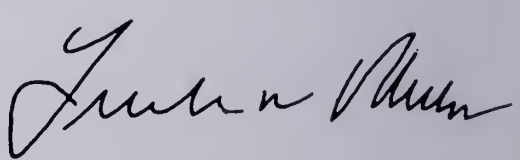
The experience in New York State this past year allowed for a reduction in premium rate rather than an increase. This fact certainly speaks very well for this program.

The company has agreed that those physicians who have liability insurance policies expiring before August 1, and who wish to subscribe with this company, may apply for coverage and be issued policies up to August 1 with the application then goes through the same usual channels as new applications after August 1. This means that those members who have insurance premiums before August 1 may enroll now rather than cancelling their present insurance and having to submit to a six per cent cancellation penalty.

This program will be operated through the State Association building. Other than the mailing of premiums to the company's central office in Wisconsin all business will be conducted through the Association office. We are therefore thankful that we will have a building expansion to provide for this office space.

I cannot help but believe that we physicians in Alabama compare favorably with those of New York State in regard to our ethical commitment, our conscientiousness and our moral fortitude and character. We have an opportunity to make of this program what we wish.

An educational program in regard to the prevention of malpractice claims is to be undertaken collectively by the insurance company with the Association. It is my hope and belief that we will operate a successful program.

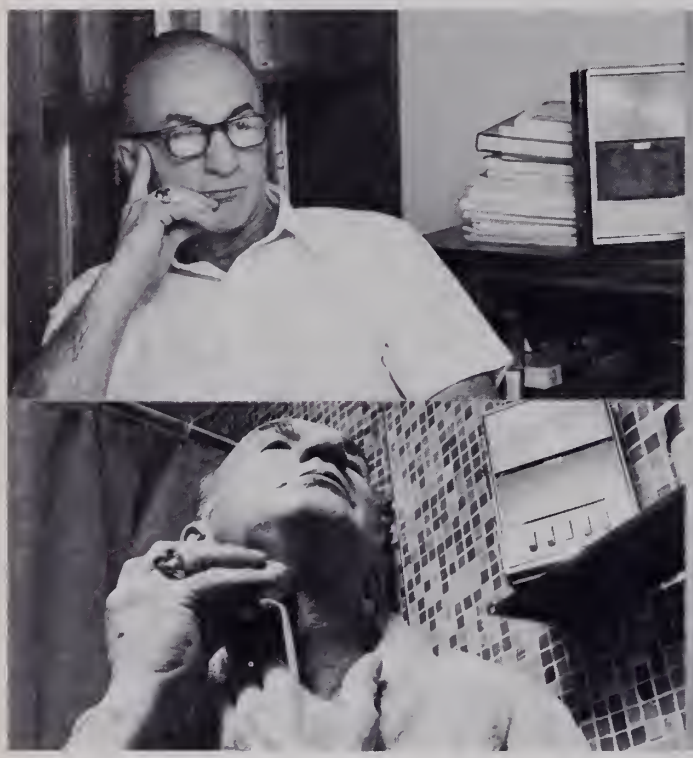


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AUXILIARY PLEDGE

"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

HEALTH EDUCATION IS THE KEY was the title of the conference which four of us from the Woman's Auxiliary attended recently in Chicago. This meeting was sponsored by the American Medical Association and the Woman's Auxiliary to the AMA in cooperation with 70 national volunteer organizations. It was the first of a series of follow-ups to the AMA's National Congress on the Quality of Life which focused on the early years (conception through 25). This was a timely meeting which generated interest throughout the country as shown by the 300 people in attendance. One half of these were Auxiliary members who paid their own expenses.

With the idea that human blight can be prevented, the two days were spent exploring health education techniques. The conference was set up with the belief that the quality of life at all ages depends to a great extent on the effectiveness of education. If existing knowledge were better utilized, most problems could be prevented or diminished. The need for everyone to develop a sense of personal and community responsibility for the solutions to health problems was underscored.

We learned that health education is much more than the display of clever posters. It must include motivation and the development of skills in problem solving, the determination of values, and decision making. It is not enough to treat symptoms only, but an attack must be made on the causes.

Along with health education information must go the concept that each individual is responsible for his own health. The medical



MRS. HANSBERRY

profession cannot accept this responsibility alone, neither can it be legislated. However, health education can make individuals aware of their responsibility, and can inform people how to obtain and maintain good health

One of the primary functions of the Medical Auxiliary, as stated in our bylaws, is to assist the Medical Association in advancing the cause of preventive medicine. We must join with other community agencies in making health education programs available to our citizens. These programs could be in day care centers, nursery schools, kindergartens, health care centers, schools, adult education classes, and seminars in parenting and child

(Continued on Page 958)

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(Continued from Page 957)

growth and development. Teaching children about their bodies must become as important as teaching them about the universe. Only through such programs of education can we bring about a turning point and develop a firm foundation for improving the quality of life for the present and future generations.

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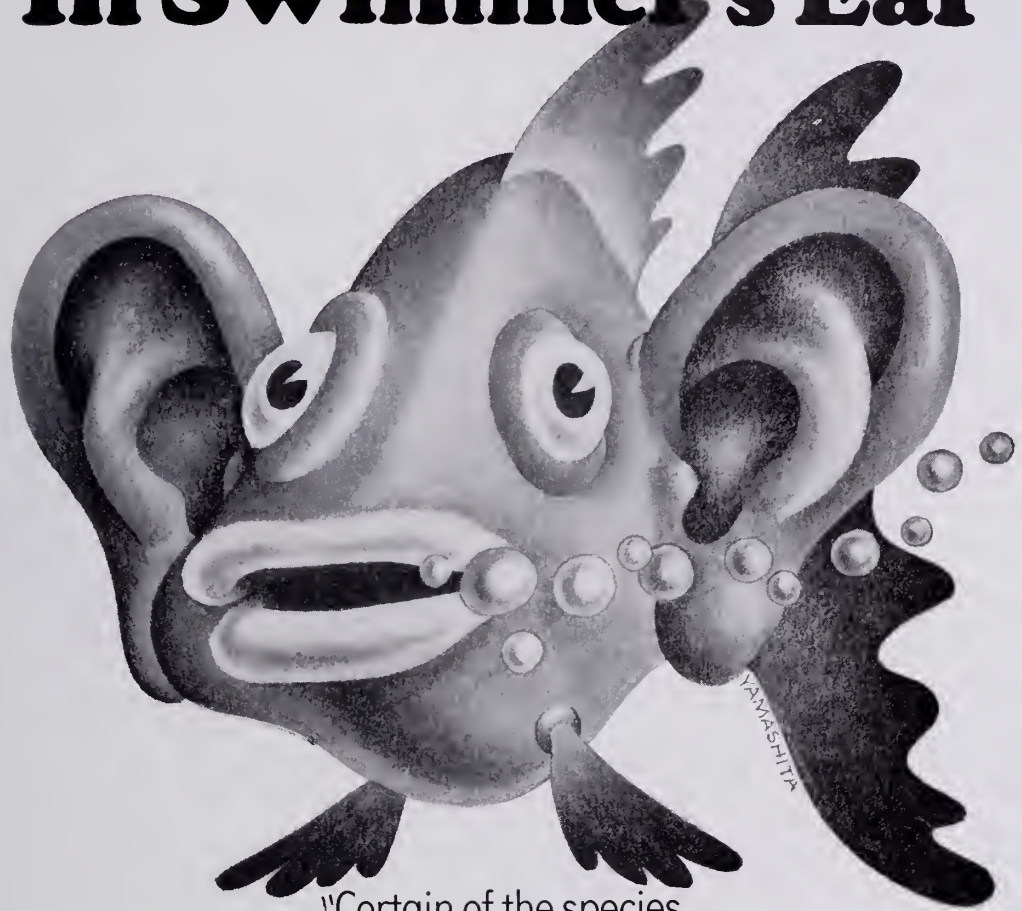
Annual Otolaryngologic Assembly

THE ANNUAL OTOLARYNGOLOGIC ASSEMBLY OF 1972 will be held October 14 through 20, 1972, in the Eye and Ear Infirmary of the University of Illinois Hospital. The Department of Otolaryngology, Abraham Lincoln School of Medicine, University of Illinois at the Medical Center, offers a condensed basic and clinical program for practicing otolaryngologists under the direction of Emanuel M. Skolnik, M. D. It is designed to bring to specialists current information in medical and surgical otorhinolaryngology.

Interested otolaryngologists should direct their inquiries to the mailing address: OTOLARYNGOLOGY, P. O. Box 6998, Chicago, Illinois 60680

A separate, but correlated course, "CONFERENCE ON RADIOLOGY IN OTOLARYNGOLOGY and OPHTHALMOLOGY" will be held this year on Friday and Saturday, November 24 and 25, under the guidance of Galdino E. Valvassori, M. D. For further information about the radiology conference, write to Professor Valvassori, Radiology Department, Abraham Lincoln School of Medicine, P. O. Box 6998, Chicago, Illinois 60680.

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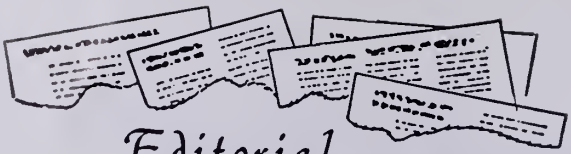
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Editorial
COMMENT

Fragmentosis Or Unitasis In Medicine

The medical profession today is becoming highly fragmented. There have always been divisions of opinion. There were homeopaths and eclectics and allopaths, but these differences have largely been resolved. There have been osteopaths, most of whose departures from the orthodox medical fold have been eliminated at the scientific level, and are resolving at the educational and administrative levels. But as old divergences disappear, new ones develop.

The American Medical Association survives as the organizational base for the preponderance of practicing physicians and their colleagues in teaching, research, administration and the like. It is slow to change its policy positions. Perhaps there is no single physician who agrees with them all. As a result, there have been, and continue to be defections, on grounds which may be religious, political, financial, or philosophical. There are those who might otherwise be content, but who object to the AMA position on abortions as being too liberal or too constrictive, so some of each persuasion split off. There are those who object to the concepts of the way in which the medical profession should deal with government, at arms length or in close collaboration. There are physicians who are persuaded that the entire delivery system of medical care must be structured along the Russian principles of dialectic materialism. There are conservatives and ultra-conservatives. There are large numbers of medical students, interns, residents, young physicians and academicians who follow essentially no leadership, but regard themselves simply as anti-establismentarian. The question arises as to the survival value of a profession so beset. Indeed, the question may be raised as to the capacity to endure as a profession. This might be a highly hypothetical question, were it not for the fact that the critics of medicine are so willing to move in through legislative revenues to convert the entire profession into a public utility, governmentally operated and peopled by highly educated technical tradesmen.

I presume that there will always be an inability of a middle ground organization to accommodate extremists. There will inevitably be radical rebellionists on the left and reactionary isolationists on the right. They may be left to their own devices. But I would submit that for the overwhelming majority of professional medical people, there should be some broadening of perspective. If the AFL-CIO, UAW, UMW, Steelworkers and Teamsters can coalesce to defeat us, can we defend ourselves from tiny diverse and divided camps? Tunnel vision, or gun-barrel sight is a serious disability.

The greatest threat to American medicine today is not outside our profession, but within it. If there are things which are not clearly right in the policies of our major medical organization, the work of those who disagree can set them right. The need is for cooperative, constructive strengthening of the position of a great profession. With that strength we need not fear external assaults.

(Excerpt from an editorial by Russell B. Roth, M. D., Speaker of the AMA House of Delegates, in December 1971 bulletin of the Erie County Medical Society.)

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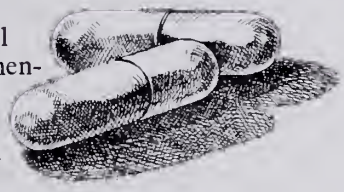
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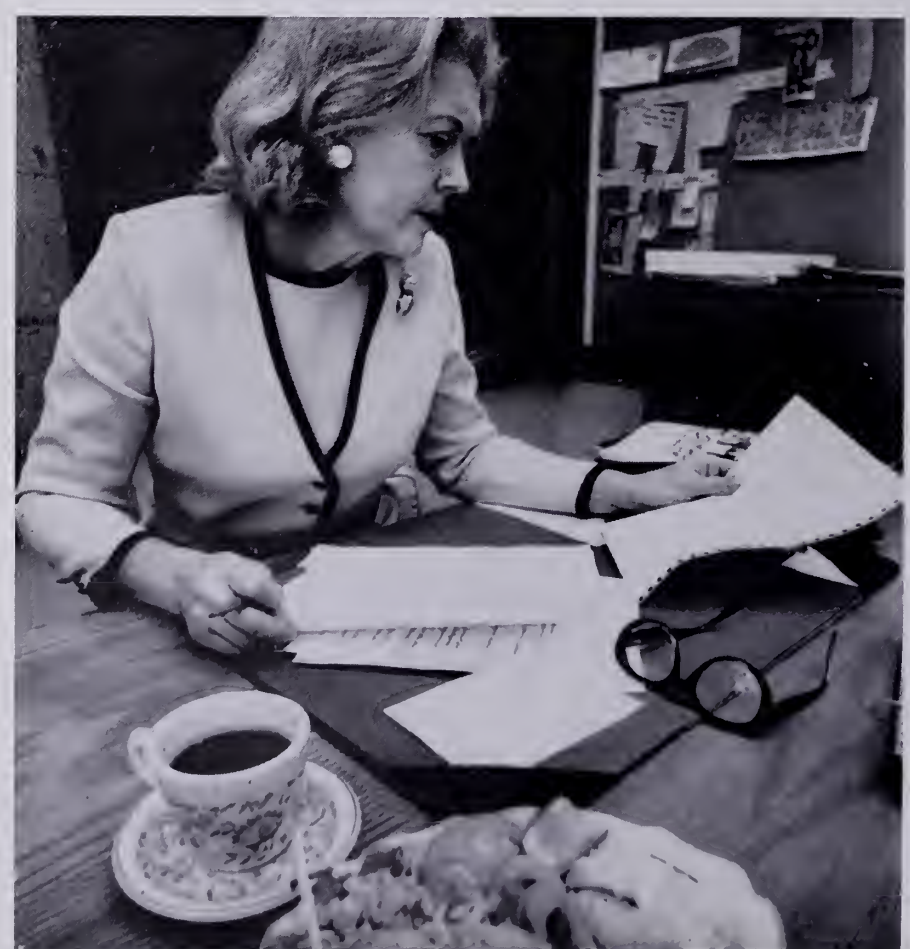
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—George Sarton, from "The History of Medicine Versus the History of Art"

Would it be useful in clinical practice to have government predetermine drugs of choice?

Opinion

Results of a survey of physicians:

13.3%
Yes, it would be useful.

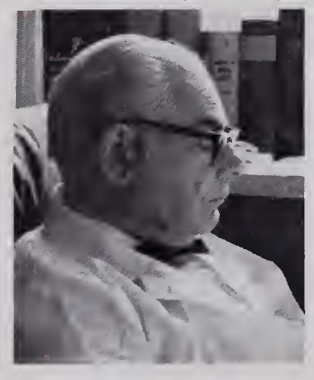
86.7%
No, it would not be useful.

Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial differences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy in practice can really be determined.

The Bureau of Drugs has suggested the package insert as a possible means of communicating information on relative efficacy of drugs to the physician. I find this objectionable, since I do not believe the physician should have to rely on this source for final scientific truth. There is also a practical objection: Since few physicians actually dispense drugs, they seldom see the package insert. In any event, I would maintain that the physician should know what drug he wants and why without depending on the government or the manufacturer to tell him.

Undoubtedly, physicians are swamped by excessive numbers of drugs in some therapeutic categories. And I am well aware that many drugs within such categories could be eliminated without any loss, or perhaps even some profit, to the practice of medicine. But, in my opinion, neither the FDA nor any other single group has the expertise and the wisdom necessary to determine the one "drug of choice" in all areas of medical practice.

Maker of Medicine

Kenneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company



In my opinion, it is not the function of any government or private regulatory agency to designate a "drug of choice." This determination should be made by the physician after he has received full information on the properties of a drug, and then it will be based on his experience with this drug and his knowledge of the individual patient who is seeking treatment.

If an evaluation of comparative efficacy were to be made, particularly by government, at the time a new drug is being approved for marketing, it would be a great disservice to medicine and thus to the patient —the consumer. For example, when a new therapeutic agent is introduced, on the basis of limited knowledge, it may be considered to be more potent, more effective, or safer than products already on the market. Conceivably, at this time the new drug could be labeled "the drug of choice." But as additional clinical experience is accumulated, new evidence may become available. Later, it may be apparent that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B_{12} as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. However, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use —information that the pharmaceutical manufacturers must begin to provide if government regulation of "*drugs of choice*" is to be avoided.

Opinion & Dialogue

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Published Under the Auspices of the Board of Censors

Volume 41 **June, 1972** **Number 12**

The Normal Occurrence Of Hypothrombotic Blood In Normal Pregnancy

J. H. Rogers, M. D.

Gadsden, Alabama

An interesting article by Dr. A. V. Drill[1] (JAMA, Jan. 31, 1972) concerning oral contraceptives and thromboembolic disease in non pregnant and pregnant women raises the subject of blood thrombogenicity (or "coagulability") in pregnancy at which time it is generally thought to be increased. This view seems to be compounded of the teleological argument that the gravid organism is preparing for the hemorrhage associated with parturition, the proneness to thromboembolic complications at parturition and the puerperium, and the known rise in the level of some clotting factors in advanced pregnancy, notably fibrinogen and antihemophiliac globulin and more recently rises in certain blood lipids which are thought to play some part in initiating thrombosis.

In 1964, I[2] expressed a contrary opinion, for whatever the state of coagulability (or thrombogenicity) may be in early pregnancy, parturition, or the puerperium, it is hardly likely to be increased during mid and late pregnancy. At this time mechanical factors leading to venous stasis in the pelvis and legs and no doubt trauma to the vessels in the pelvis from the enlarging uterus should favor thromboembolism and this plus hyperthrombogenicity should increase the frequency of this complication. Actually this does not occur as demonstrated by Drill, and thromboembolism is no more common in the pregnant woman as the non pregnant one. This finding greatly strengthens my contention that the blood in normal pregnancy is hypothrombotic. This is a matter of great fundamental and eventually, practical importance. It raises the question of the incidence of coronary thrombosis in pregnancy. This appears to be exceedingly rare. A total of only 30 cases of myocardial infarction were found in the world medical literature by Fletcher, Knox and Morton[3] in their publication in 1967. Moreover, many or most of these cases evidently were diagnosed by EKG and not at the autopsy table. They also included cases occurring during labor.

The erythrocyte sedimentation rate (E.S.R.) rises regularly in pregnancy, (and falls promptly in the puerperium). The immediate cause for this phenomenon is red cell rouleaux formation which is brought about by changes in the plasma proteins, chiefly elevation of fibrinogen and globulins and lowering of albumin. This "sludged" blood is hardly a mechanism of disease since pregnant women usually are quite healthy and feel fit particularly in mid and late pregnancy. It is my belief [4, 5] that rouleaux act as a normal mechanical protective device against thrombosis by improving the sweeping action of the blood stream and (single red cells) in removing platelet clumps from injured vascular endothelium (particularly

arteries) and by denying platelets access to injured endothelium. Further it is my contention that rouleaux will lessen the dissolution of red cells with consequent lessening of release of procoagulant substances from erythrocytes because of the decrease of the total exposed red cell surface. This belief is born out by the finding of a raised E. S. R. in a number of medical conditions in which coronary thrombosis and/or pulmonary embolism are relatively rare. Beside pregnancy these include tuberculosis [6, 7] leprosy[8], multiple myeloma [9, 10] and certain "normal" populations[11] in primitive countries where the problem has been studied—as well as normal premenopausal women (myocardial infarction) who are not pregnant. Conversely in patients with sickle cell anemia, in whom the E. S. R. is abnormally decreased owing to the shape of the erythrocytes, which cannot form rouleaux, thrombotic events are frequent and a common mode of death, and these are multiplied in pregnancy.

The pregnant woman presents a natural model for conditions which favor thromboembolism, with increasing venous stasis in the pelvis and legs and no doubt traumatism of the pelvic vessels by the enlarging gravid uterus. It is difficult to believe that Nature would not provide some protective device against these fundamental initiators of thrombosis.

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What No One Knows, Though Everyone Should, About IPPB Machines

Part III—Bird

D. S. Tysinger, Jr., M. D.

Dothan, Alabama

The next type of IPPB machine to be considered in this series of articles is the Bird machine which starts from source power of 50 PSI and 130 L/min. as did the other types. Here the first Leak *A* is again a variable flow leak. Just beyond this is the on-off valve. The valve slides back and forth to allow for off or for flow. There is a metal plate on each end of the on-off valve. On the *on side* of the on-off valve there is a rubber diaphragm attached to the metal plate which is in a closed chamber where the positive pressure is built up. Adjustable magnets are placed on either side to act on the metal plates. The two magnets are adjusted so that when the machine is in the *off position* the magnets on the *off* side (*O* in Figure No. 13) will have a greater effect on the metal plate on that side and the machine stays in the off position. As the patient breaths and makes a slight negative pressure in the closed positive pressure chamber side, then the second magnet (*P* in Figure No. 13) plus the negative pressure the patient produces causes the on-off valve to slip to the on *position*. Now magnet *P* has a stronger pull on the *on-off valve* than magnet *O* and the machine stays on. As the patient breaths in and as back pressure is built up in the positive pressure chamber, the force of this increased pressure on the rubber diaphragm plus the force of magnet *O*, now becomes greater than the force of magnet *P* and the machine shuts off. By controlling the distance of the two magnets from the metal plates the sensitivity to breathing in and the pressure at which cut off occurs can be controlled. With this type machine distance between parts is very short and diameter small. The chamber between the variable leak at *A* and on-off valve *C* rapidly returns to line pressure of 50 PSI. Nebulizers, etc., are controlled beyond the on-off valve. The nebulizer line takes off just beyond the on-off valve and is at high pressures. It only runs when the on-off valve is in the on position. (Figure No. 14A) Here, again, a venturi is used to control air-oxygen mixture or an alternate flow of oxygen into the pressure chamber. (Figure No. 14A)

The Bird machine differs from other machines in that there is no flow when the *on-off* valve is in the *off* position. The nebulizer only works when the machine is in the on position. A second difference is that pressure is controlled completely and separately from flow. Since the tubing from Leak *A* on through the venturi jet is short and volume very small, this area rapidly approaches 50 PSI when on. The nebulizer receives a standard high pressure and flow, no matter what the pressure or flow rate setting. A third difference is that, if the on-off valve is held in the on position, pressure will continue to rise slowly in the positive pressure chamber until the on-off valve is allowed to close. Once closed it returns to pre-set cycling pressure.

The final step with this principle is the expiratory control. Here, the balloon principle is again used. However, since the nebulizer is only running during inspiration, the same source can cause nebulization and control the exhalation valve. (Figure No. 14B)

Next, refer to *Flow Diagram* ♯4. Here, the Bird block is diagrammed. Line flow starts at 50 PSI and 130 L/min. At Leak *A*

a needle valve opens to adjust flow which, due to the small volume, does not effect pressure. From here the adjusted flow rate (12-50L/min.) continues to the on-off valve at 50 PSI. Beyond the on-off valve the pressure is zero in the off position. This valve is turned on by producing the pre-set subambient pressure in the positive pressure chamber. The patient is aware of producing this subambient pressure. It is more noticeable than in the Bennett and Retec because there is no flow at all during expiration. In the Bennett and Retec there is nebulizer flow and even though the same or greater pressure was produced the patient was not as aware of it because there is this flow during expiration which cushions the subjective feelings of—but not the production of—this cut on pressure.

From the on-off valve the flow goes to the nebulizer and venturi jet or straight into the positive pressure chamber. The jet orifice size is such and delivery tubes diameters are such, in relation to nebulizer orifice size, that flow through the nebulizer is first. The pressure that drives the venturi jet and nebulizer is also the pressure that keeps the exhalation valve closed during inspiration. The pressure is 41 PSI. The pressure is sufficiently high to cause closure without leaks. The nebulizer flows at 6-10 L/min. (See Table No. 4 Bird) This flow arrives at the patient first fully humidified and with an abundance of particles. Venturi jet and intrainment flow start and produce pressure buildup and flow in the large positive pressure chamber before much flow is produced down the tube to the patient. This time interval allows for the first portion of inspiration which is the part delivered farther down into the lungs and which carries the largest amount of particles. The nebulizer working at a constant flow puts out the same amount of particulate material throughout the shole of inspiration. In the Bird, as in the Bennett and Retec, this first portion is all source gas (oxygen if from wall outlet). Thus, high oxygen concentrations and high particulate material is delivered the deepest into the lungs. The venturi jet flow varies as to volume flow and intrainment and thus the rate of pressure buildup. Venturi jet flow varies as to flow settings from 6-37 L/min. (See Table No. 4 Bird) The higher the flow rate the greater the humidifying requirements and these requirements are produced quicker by shortening the primary nebulizer flow part of inspiration.

As flow rate increases venturi intrainment

BIRD TABLE #4
FLOW VOLUME TABLE-AIR-OXYOEN MIX

FLOW SETTING	5	7	10	15	20	25	30	35	40	
JET FLOW	6.5 6-7	9.5 9-10	10.5 10-11	14.5 12-16	16.5 16-17	18.5 18-19	20	21.5 21-24	35.5 34-37	
NEBU-LIZER	8 6-10	8 6-10	8 6-10	8 6-10	8 6-10	8 6-10	8 6-10	8 6-10	8 6-10	
PRIMARY TOTAL	14.5	.17.5	18.5	22.5	24.5	26.5	28	29.5	43.5	
VENTURI INTRAIN-MENT	5.6 5-7	23 17-25	32 24-34	44 42-56	52 49-63	62 55-68	66 59-68	70 68-73	72 68-74	
AVERAOE TOTAL FLOW	20.1	40.5	50.5	66.5	76.5	88.5	94	99.5	115.5	
AVERAOE OXYOEN CONCENTRA-TION %	56%	44%	42%	48%	40%	40%	40%	40%	58%	

** ALL FLOWS ARE IN LITERS PER MINUTE

TABLE #5

AIR OXYGEN MIX THROUGH TUBE

TUBE	FLOW RATE	FLOW	PERCENT OXYGEN CONCENTRATION	BACK PRESSURE	VOLUME OF VENTURI LEAK
2mm	5	4.5L/min	100%	30cmH20	10L
2.5mm	5	6L/min	100%	45cmH20	14.5-6 8.5L
3mm	5	7.5L/min	100%	15cmH20	7L
4mm	5	12L/min	100%	4cmH20	2.5L
"	7	15L/min	100%	7cmH20	2.5L
"	10	19.5L/min	100%	12cmH20	+1L
"	15	21L/min	100%	15cmH20	-1L
5mm	5	15L/min	100%	3cmH20	3L
"	7	19.5L/min	100%	7cmH20	•2L
"	10	24L/min	100%	10cmH20	+4.5L
"	15	30L/min	100%	13cmH20	+7.5L
6mm	5	21L/min	83%	3cmH20	+6.5L
"	7	30L/min	90%	5cmH20	+12.5L
"	10	36L/min	100%	9cmH20	+17.5L
"	15	39L/min	100%	11cmH20	+17.5L
7mm	5	27L/min	58%	2cmH20	+12.5L
"	7	33L/min	64%	5cmH20	+25.5L
"	10	42L/min	84%	8cmH20	+33.5L
"	15	51L/min	100%	9cmH20	+28.5L
8.5mm	5	30L/min	46%	2cmH20	+15.5L
"	7	39L/min	55%	3cmH20	+21.5L
"	10	48L/min	60%	6cmH20	+29.5L
"	15	57L/min	65%	7cmH20	+34.5L
9.5mm	5	30L/min	40%	2cmH20	+15.5L
"	7	45L/min	48%	3cmH20	27.5L
"	10	54L/min	50%	5cmH20	55.5L
"	15	60L/min	50%	7·mH20	37.5L

increases with this machine on air-oxygen mix. Through the middle portions of the flow rate range air-oxygen mix produces 40 per cent oxygen concentrations. At the low end-flow settings of 5, 7, and 10- oxygen concentrations decreases from 56 per cent to 40 per cent. At this low flow, flow is so slow that venturi intrainment is not as effective. At the top end also, flow is reduced in relation to venturi intrainment and oxygen per cent concentrations again go up. The air-oxygen mix is most accurate through the middle ranges. (Bird Table No. 4)

Little change in oxygen concentrations

could be obtained by obstructing the ambient chamber copper filter. With three-fourths obstruction oxygen per cent goes up to 60 per cent.

When back pressure was put on the venturi by nasotracheal intubation tubes then oxygen per cent concentrations were more effected. (Table No. 5 Bird) The machine did ventilate through a 2 mm nasal catheter at 30-35 cmH2O pressure and a flow setting of 5 and produced 4.5 L/min. flow. This flow is primarily nebulizer flow, the remainder going back toward the machine. Venturi intrainment is completely blocked and oxygen concentrations is 100 per cent. Venturi intrainment is likewise stopped with 100 per cent oxygen delivery through the 5 mm tube size. In the 6 mm tube venturi intrainment is slight at 5 and less at a 7 flow rate setting. Even in the 9.5 mm tubing 40 per cent concentrations is only reached at flow settings of 5 and 7 where there is very little back pressure.

The flow rate settings have different meanings when on straight oxygen. Nebulizer flow is the same. The orifice into the positive pressure chamber is smaller and flow is less.

TABLE # 6

100% OXYGEN	9.5 mm TUBE				Pressure
FLOW RATE	TOTAL FLOW		NEBULIZER	JET FLOW	
40	39L/min	-	8 =	31	3cmH20
30	24L/min	-	8 =	16	1cmH20
20	18L/min	-	8 =	10	1cmH20
15	15L/min	-	8 =	7	0
10	12L/min	-	8 =	4	0
7	10.5L/min-		8 =	2.5	0
5	9L/min	-	8 =	1	0

(See Table No. 6 Bird) Here positive chamber flow, not including nebulizer flow, can be seen to be 1 L/min. at 5 and 31 L/min. at 40. Total flow of 9 L/min. at 5 and 39L/min at 40 are produced. Thus, when on 100 per cent oxygen to obtain reasonably equal flows of 5 on air-oxygen mix would require flow settings of 20-30 and flows of 10-15 air-oxygen require flow settings of 40. In flow settings under 15 the nebulizer produces more of the volume delivered than the machine flow.

The outlet end of the venturi in the positive pressure chamber has a spring loaded closure cover. This is call an "air clutch." As pressures are built up rapidly, the spring plus the back pressure cause the clutch to temporarily close. Pressure falls and venturi flow opens it again. In this way, and because of this, turbulent back pressure is overcome by this clutching maneuver. Then, the flow temporarily stops, turbulence subsides, and flow starts again. During the use of 100 per cent oxygen there is also closure of the venturi to prevent back flow. This mechanism was designed to help ventilate tight tubes and obstructed areas.

This machine will ventilate a 2 mm tube at 30-35 cmH2O pressure and put 4.5 L/min through the tube. The minimum primary wall flow at this flow rate is 14.5 L/min. What happens to the other 10L? Something must be done with it or the machine would build up pressure and recycle. The exhalation valve is very tight due to the 40 PSI pressure keeping it closed. Very little leakage occurs here. The venturi was studied closer since it is the other obvious leak. When the machine is on and on air-oxygen mix at flow setting of 5 and 2mm nasal catheter, the positive pressure chamber pressure is 30-35 cmH2O. The nebulizer flow is greater than the delivery out of the tube. There is no leak out of the nebulizer, thus part of the nebulizer flow must flow back through the delivery tube to the machine. The machine flow only goes to buildup pressure. This flow must reach 41 PSI or the pre-set pressure and cut off. 4.5 L/min is being delivered at 30-35 cmH2O pressure and the machine continues to flow. The machine is putting out 14.5 L/min. into, or toward, this unit space. The pressure of the jet keeps popping the "air clutch" open and then pressure closes it but leak occurs. Most, or possibly all, of venturi flow is outward through the ambient chamber filter. No intrainment flow occurs, and part of the nebulizer flow is lost out of the venturi. It is impossible to

accurately evaluate this venturi back flow on air-oxygen mix. The leakage varies to some extent due to variations in clutch performance.

TABLE #7

100% OXYGEN

VENTURI LEAK

100% OXYGEN DEMONSTRATION OF VENTURI LEAKS RELATED TO PRESSURE

TUBE SIZE	NEBULIZER FLOW	TOTAL FLOW	FLOW SETTING	POSITIVE PRESSURE CHAMBER READING	LEAK
2mm	8L	9	5	35cmH2O	2.4L
"	8L	9.5	½way between 5-7	40cmH2O	4.0L
2½mm	8L	9.0	5	18cmH2O	0.75
"	8L	10.5	7	28cmH2O	1.2
"	8L	12	10	40cmH2O	4.0
3mm	8L	12	10	17cmH2O	0.750
4mm	8L	12	10	5cmH2O	0.400
5mm	8L	12	10	2cmH2O	0.200
6mm	8L	12	10	2cmH2O	0.200
7mm	8L	12	10	0	0

When put on oxygen 100 per cent venturi leakage can be studied. (See Table No. 7) Flow and leakage due to pressure using 2mm tubes, 2½mm tubes, and 3-7mm tubes is presented. Leaks as high as 4L/min could be measured. Leaks, at least partly through the venturi, account for the difference in volume produced and volume delivered.

Moisture delivery is good. To understand why, the difference in side arm and main stream nebulization must be understood. With a side arm nebulizer particles are produced in proportion to nebulizer flow. Volume flow of the nebulizer is the only flow that will carry particles. More particles are produced than can be delivered by this flow volume, thus the remainder is returned to the nebulizer flow volume. When the machine is on, the nebulizer particle volume that can be transferred from the nebulizer to the main flow line by the nebulizer flow is all that is available for delivery.

With main stream nebulizers all the machine flow plus the nebulizer flow will be saturated and a much larger volume of particles can be delivered over the same period of time. With nebulizer flow only 0.5 cc/min. is nebulized out of the nebulizer. With the machine on and nebulizer plus machine flow through the nebulizer then 0.75-0.8cc/min is delivered. With the patient breathing on the machine, 5cc is delivered in an average of 15 minutes. Of this time the machine is on 1/3 of the time, or 5 minutes, which would be 1.0cc/min. Going back to Table No. 4 Bird and remembering it takes 0.044cc/min to humidify one liter of dry air at body temperature volumes for humidity and volume delivery can be figured out with 25, 50, 75, and 100 per cent relative humidity of intrainment flow. The potential volume delivery here is high compared to the side arm nebulized machines simply because of putting the nebulizer into the main stream. Lower controllable flow rates keep down turbulence and enhance particle delivery. The side arm machines which produce a water deficit can all be markedly improved by changing to atomizer-type main stream nebulization.

Oxygen consumption per minute, per hour, and per 24 hours is tabulated from wall flow at the various flow settings from a flow rate of 5-40. These figures were derived from Table No. 4 Bird and Table No. 6 Bird. (See Table No. 8) If a negative phase on expiration is to be used also, it takes 6L/min to produce 3 cmH2O negative pressure and 12L/min turbulence, 5 cm negative pressure. This flow is only during the expiratory phase. This must be added for 24 hour utilization. This machine requires about 1/3 the driving source gas on treatment on 24 hours per day usage as the high flow rate machines.

Recycling is accomplished by simply filling a spring loaded cartridge and, with a needle valve controlling the rate at which it empties, the machine is turned on. Pressure settings and flow rate settings control the nature, volume and duration of inspiration.

The versatility of separately controlled flow and pressure make this machine easily adjustable to controlled plateau ventilation, trapping techniques, obstructive techniques, pulmonary edema techniques, psying techniques, etc. The uncontrollable high flow rate machines cannot be adjusted to these

TABLE # 8

Wall oxygen consumption, inspiration 1/3, expiration 2/3

Nebulizer and venturi jet

Air-oxygen mix

FLOW RATE	L/minute	L/hour	L/24 hours
5	4.83	289.8	6955.2
7	5.83	349.8	8389.2
10	6.17	370.2	8884.8
15	7.5	450.0	10960.0
40	14.5	870.0	20880.0
	NEBULIZER AND 100% OXYGEN		
5	3L/min	180	4320.0
7	3.5L/min	210	5040.0
10	4L/min	240	5760.0
15	5L/min	300	7200.0
40	13L/min	780	18,720.0
	NEGATIVE PHASE ON EXPIRATION		
3cm neg.	4L/min	240	5,760.0
5cm neg.	8L/min	480	11,520.0

modalities. The pressure buildup area, positive pressure chamber, tubing, nebulizer, and exhalation valve assembly and mouthpiece comprise a volume of 1,000 cc. thus 15-20 L/min flow builds up pressure slowly.

Machines mentioned are Bird Mark 7 and 8. The Bird Mark 9 is like the Bird Mark 8 only ventilatory pressures can be obtained are much higher. The bird Bark 10 and 14 have flow esculator attachment which compensates for leaks. This is instituted to cut in high flow rates sufficient to cause upper airway turbulence and machine recycling after ventilatory flow rates have filled the lungs.

Finally this machine can be completely disassembled, repaired, and put back together by a knowledgeable therapist, technician, or trained repair personnel in several hours no matter what goes wrong. The other machines are not designed for anything except factory repair, which is expensive and takes the machine out of operation for weeks or months at a time.

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the Ovulen phase

Most women* with a **balanced hormone profile and normal menses** do best on a middle-of-the-road pill that is neither estrogen dominant nor strongly progestogen dominant.

(*Typical clues—normal body build and breasts, feminine appearance, healthy skin and hair. Vaginal cytology slide—balanced "pink and blue.")

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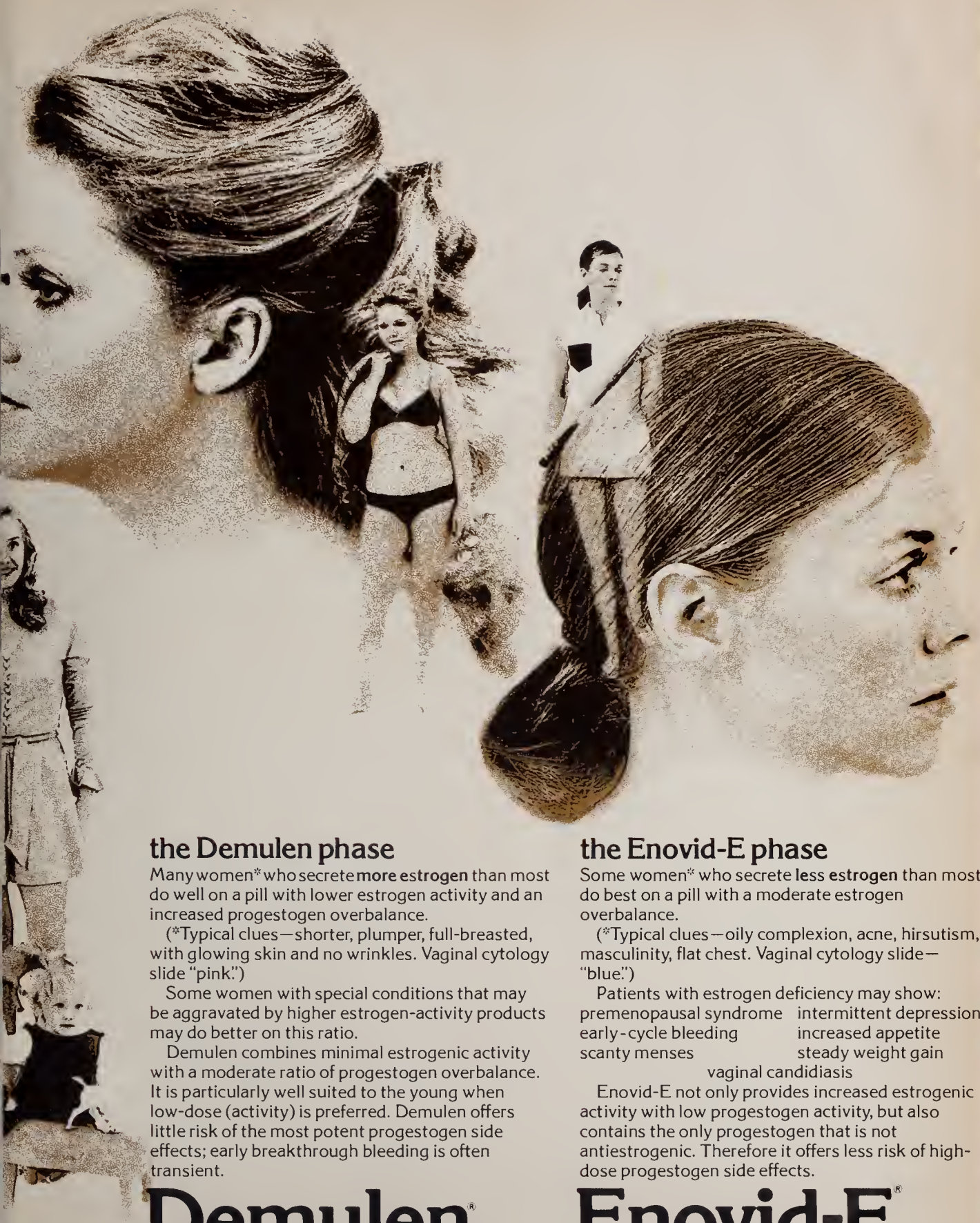
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SEARLE

For brief summary of prescribing information, see following page.



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the Enovid-E phase

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(*Typical clues—oily complexion, acne, hirsutism, masculinity, flat chest. Vaginal cytology slide—"blue.")

Patients with estrogen deficiency may show:

premenopausal syndrome
early-cycle bleeding
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Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X, thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

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The *Special Note, Contraindications, Warnings, Precautions* and *Adverse Reactions* listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

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Only CANDEPTIN gives you a dosage form for every therapeutic need, plus *eight years' clinical proof* of potency. Consider CANDEPTIN for your next vaginal moniliasis patient.

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Description: CANDEPTIN (candicidin) Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% Candicidin activity in U.S.P. petrolatum. 3 mg. of Candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain Candicidin powder equivalent to 3 mg. (0.3%) Candicidin activity dispersed in starch, lactose and magnesium stearate. CANDEPTIN VAGELETTES Vaginal Capsules contain 3 mg. of Candicidin activity dispersed in 5 gm. U.S.P. petrolatum.
Action: CANDEPTIN Vaginal Ointment, Vaginal Tablets, and VAGELETTES Vaginal Capsules possess anti-monilial activity.
Indications: Vaginitis due to Candida albicans and other Candida species.
Contraindications: Contraindicated for patients known to be sensitive to any of its components. During pregnancy manual Tablet or VAGELETTES Capsule insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.
Caution: During treatment it is recommended that the patient refrain from sexual intercourse or the husband wear a condom to avoid re-infection.
Adverse Reaction: Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment, Vaginal Tablets or VAGELETTES Vaginal Capsules have been extremely rare.
Dosage: One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet or one VAGELETTES Vaginal Capsule is inserted high in the vagina twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.
Available Dosage Forms: CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil with inserter—enough for a full course of treatment. CANDEPTIN VAGELETTES Vaginal Capsules are packaged in boxes of 14 (14-day regimen requires 2 boxes.)

Store under refrigeration to insure full potency.

Federal law prohibits dispensing without prescription.

References: **1.** Olsen, J.R.: Journal-Lancet *85*:287 (July) 1965. **2.** Giorlando, S.W.: Ob/Gyn Dig. *13*:32 (Sept.) 1971. **3.** Decker, A.: Case Reports on File, Medical Department, Julius Schmid. **4.** Giorlando, S.W., Torres, J.F., and Muscillo, G.: Am. J. Obst. & Gynec. *90*: 370 (Oct. 1) 1964. **5.** Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica Inc., 1960. pp. 614-618. **6.** Friedel, H.J.: Maryland M.J., *15*:36 (Feb.) 1966.

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Hobbies To Fill A Doctor's Leisure

No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard.

—Sir William Osler, 1909

Unique As A Doctor's Hobby—The Military

The philosopher who observed that "man is a military animal," might have added "and he has been, ever since the first caveman families joined hands in a community for their mutual protection."

One may choose the military as a career or profession, as an avocation or a patriotic responsibility, as a way to parade and glory, or as a way of life and of making a living. But the Mobile physician who chose it as a hobby must be unique!

Sometime between 1955 and 1965, when two books on the subject were published, Blue Springs, Alabama, over in Barbour County, lost its post office. It lost one of its native sons much earlier than that. For there was where Max Victor McLaughlin, Sr., was born on Sunday, 4 November 1928.

The future Mobile general practitioner was 17 years old when he first ventured into military service. He enlisted in the Army in 1946, in time donning the proud shoulder patch of the 11th Airborne Division, and saw service in the Pacific. In 1948, when he was mustered out of service, he was wearing sergeant's stripes on his sleeve and the Japan Occupation and American Defense ribbons on his blouse.

For four years he was earning his baccalaureate in Tuscaloosa and another four years, his M. D. in Birmingham. That was when he went into the National Guard, having earned his Army commission in the ROTC. Since



Youngest of this doctor trio of brothers, Max V. McLaughlin, M. D., Mobile, center, is the subject of this month's "Hobbies" feature. The other two, L. Durwood and Robert J. McLaughlin, are in general practice together in Ozark, Alabama. This picture was used originally in a Fathers-and-Sons in Medicine article in the June, 1969, issue of The Journal. Dr. Max McLaughlin is an ALAPAC board member from the 1st district, and Dr. Bob McLaughlin is a former board member.

that time he attends drill one week in each month, spends two weeks in summer camp—at Camp Shelby, Miss., Fort Stewart, Ga., Fort McClellan, Ala., or elsewhere—and attends special schools, most recently the Command and General Staff course at Fort Sam Houston, Texas, where he qualified for his next promotion, which is "chicken" colonel.

In general practice in Mobile for 15 years, Dr. McLaughlin finds time not only for his military responsibilities, but for regular attendance at the luncheons of the West Mo-

bile Kiwanis Club, for attendance at the Alabama State Board of Corrections meetings in Montgomery and at meetings of the ALA-PAC Board of Directors (where he represents the 1st Congressional District).

On most of the trips he takes—to AMA-AMPAC Workshops in Washington, last summer to London and Paris, the year before to the Island of Mallorca in the Mediterranean—he is accompanied by his son, Max Victor McLaughlin, Jr., age 12. And Victor, as he is called, is a great favorite wherever he goes.

Dr. McLaughlin is a widower.

Meantime, following the injunction of Sir William Osler, he is riding hard his hobby, the Alabama National Guard, probably remembering proudly the billboard boast of a decade ago:

"Sleep well tonight. Your National Guard is awake!"

—W. J. Mahoney, Jr.

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Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (*i.e.*, several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorexic agent and a restrictive dietary regimen.

Adverse Reactions: Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

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Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range: Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections. In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic: Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone

infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25—30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.



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Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: *CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS BEEN REPORTED FOLLOWING PARENTERAL THERAPY.* A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg* and *500 mg* Capsules—bottles of 24 and 100. *Sterile Solution, 300 mg per ml*—2 and 10 ml vials and 2 ml syringe. *Syrup, 250 mg per 5 ml*—60 ml and pint bottles.

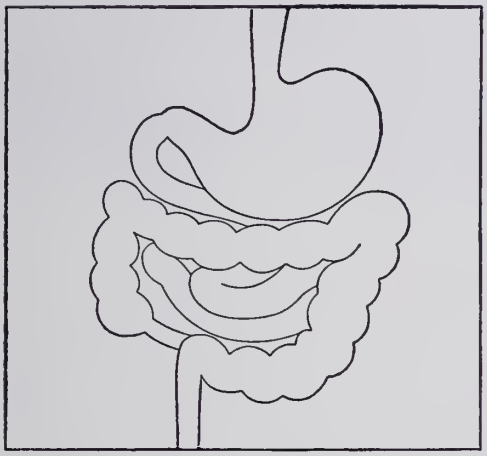
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In addition to the traditional combination of belladonna alkaloids and butabarbital (warning: may be habit forming.), Sidonna contains simethicone—a non-systemic defoaming agent that "lyses" gas bubbles on contact.

Sidonna has the ability to relieve GI spasm, pain **and gas** in the irritable bowel syndrome, spastic colon, pylorospasm, gastroenteritis, gastritis, nausea, nervous indigestion, or gastric and duodenal ulcer.

Sidonna can calm GI spasm...control anxiety...and release entrapped GI gas from the system.

Sidonna can do more for your "gasspastic" patient. Try him on 1 or 2 tablets before meals and at bedtime.

Sidonna®

Each scored tablet contains: Specially activated simethicone 25 mg.; hyoscyamine sulfate 0.1037 mg., atropine sulfate 0.0194 mg., hyoscine hydrobromide 0.0065 mg. (equivalent to belladonna alkaloids [as bases] 0.1049 mg.) and butabarbital sodium N.F. 16 mg. (Warning: May be habit forming.)

can do more

Contraindications: Anticholinergics should not be used in patients with glaucoma, known prostatic hypertrophy, or pyloric obstruction. Urinary retention may indicate the presence of prostatic hypertrophy. If it occurs, the dose should be reduced or the drug withdrawn. Also contraindicated in patients with known hypersensitivity to one of the components.
Side Effects: Dryness of the mouth, blurred vision, dysuria, skin rash, constipation or drowsiness may occur.

Reed & Carnrick/ Kenilworth, New Jersey 07033

Fathers and Sons in Medicine

Ophthalmology Attracts Both Of These Subjects

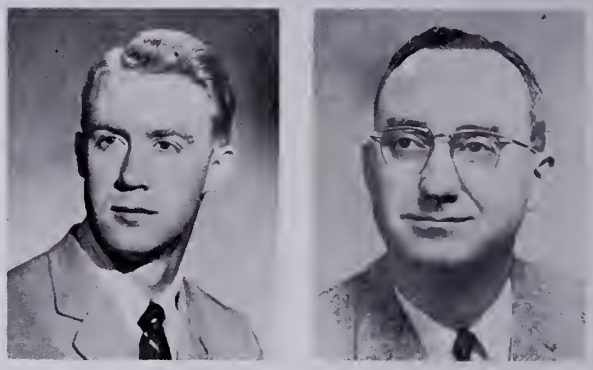
The "eyes" have a word for it—a five-syllable, 13-letter mouthfull from the ancient Greek that spells out to o-p-h-t-h-a-l-m-o-l-o-g-y. Of course, there's a simpler three-syllable, eight-letter word for one who practices ophthalmology. But occulist has fallen into disuse.

In any event, the subjects of this month's "fathers-and-sons in medicine" are a prominent Birmingham ophthalmologist and his eldest son, who followed him into medicine and then into his chosen specialty.

Joseph M. Dixon was born on Thursday, 22 September 1910, in Roanoke, Virginia, son of the late Dr. P. A. Dixon, a dentist. His education began in the public schools of Roanoke, continued through pre-med at Virginia Polytechnic Institute (1929-31), and he earned his M. D. degree in 1935 from the Medical College of Virginia, interning the next year in his alma mater's hospitals.

Footloose-and-fancy free, young Dr. Dixon spent the next two years practicing his profession among passengers and crew plying the sea lanes in ships of the Grace Steamship Company. Which was but a continuation of an enthusiasm first generated at the age of 18, before he dreamed of a career in medicine.

It was at 18 that he first enrolled as an ordinary seaman on a coastal coal freighter plying between his native Norfolk and the famous old Massachusetts whaling and shipping center of New Bedford. Other voyages of that time carried him from New York to Southampton in England and to Honduras in Central America. It was an enthusiasm that has never left him. And before he was married, before Pearl Harbor, he owned a 19-foot-one design sailboat.



DRS. JOHN M. and JOSEPH M. DIXON

In 1941, when the thunder of war in Europe seemed drawing closer and closer to American shores, Joseph M. Dixon, M. D., was married to a Roanoke girl, Virginia Matthews. And the son born to them the next year was destined to become the second subject of this article.

As Dr. Joseph Dixon had moved his family from Virginia to Alabama when the future John Dixon, M. D., was only eight years old, it was in the public schools of Birmingham that the son pursued his education through high school. But he returned to Virginia for his pre-med education, choosing W. & L. instead of V. P. I.

Now, as everyone up that way knows, the campuses of Washington and Lee and Hollins College (as well as V. M. I. and Randolph Macon) are, for all practical social purposes, the same. So it was, on this common campus that the W. & L. undergraduate met Patricia Hobitzell of Charleston, W. Va., a Hollins student. In time she became Mrs. John M. Dixon.

From Washington and Lee, with his baccalaureate degree, young Dixon went immediately into UAB's Medical School and, with

(Continued on Page 1005)

Current G.U. Research

Gantanol® in animals (sulfamethoxazole)



Control



12.5 mg sulfamethoxazole/kg of body weight



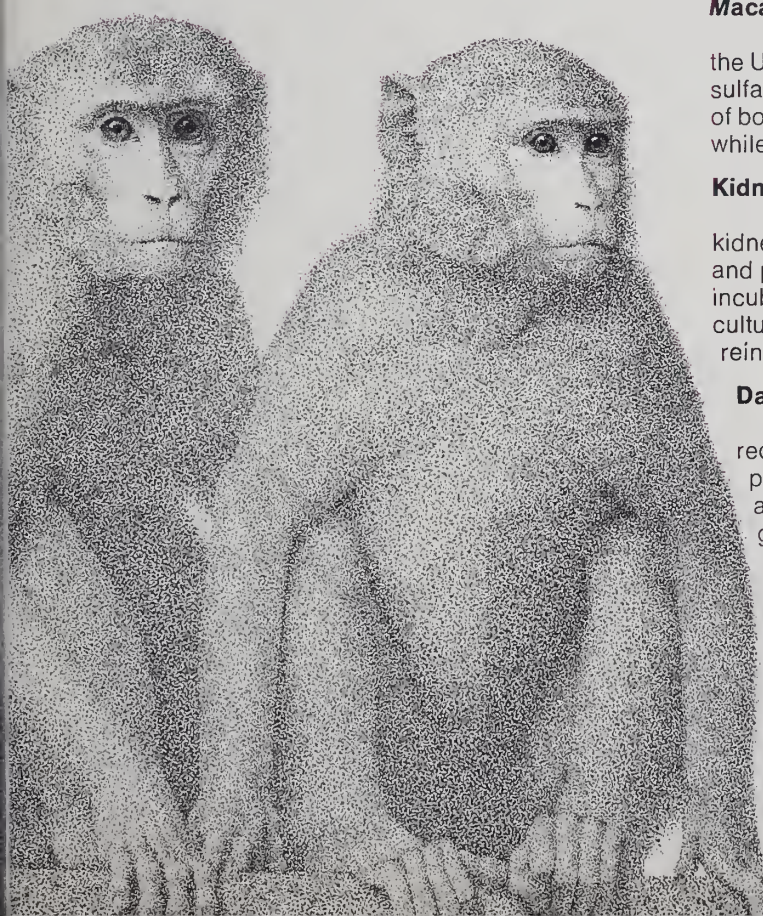
50 mg of sulfamethoxazole/kg of body weight



100 mg of sulfamethoxazole/kg of body weight

Tissue slice technique maps renal distribution in animal studies

Please note that while the method described may add to the knowledge of how antibacterial agents are distributed in the kidney of this animal, no conclusions can be drawn from this study relative to the drug's distribution, effect or use in humans, as it is not possible to extrapolate animal data to humans.



Gantanol® (sulfamethoxazole) administered to *Macaca speciosa* monkeys

Working with *Macaca speciosa* monkeys, researchers at the University of Arkansas Medical Center administered sulfamethoxazole at doses of 12.5 mg, 50 mg and 100 mg/kg of body weight. Each dosage level was given to three animals while three were left untreated as controls.*

Kidneys inoculated with *Staphylococcus aureus*

After 2½ hours, the 12 monkeys were sacrificed and their kidneys frozen with CO_2. Sagittal tissue slices were prepared and placed on blood agar bacteriological plates. They were incubated at 37°C. for 1½ hours. *Staphylococcus aureus* broth culture was then used to inoculate the tissue and slices were reincubated.*

Dark staining reveals heavy bacterial growth

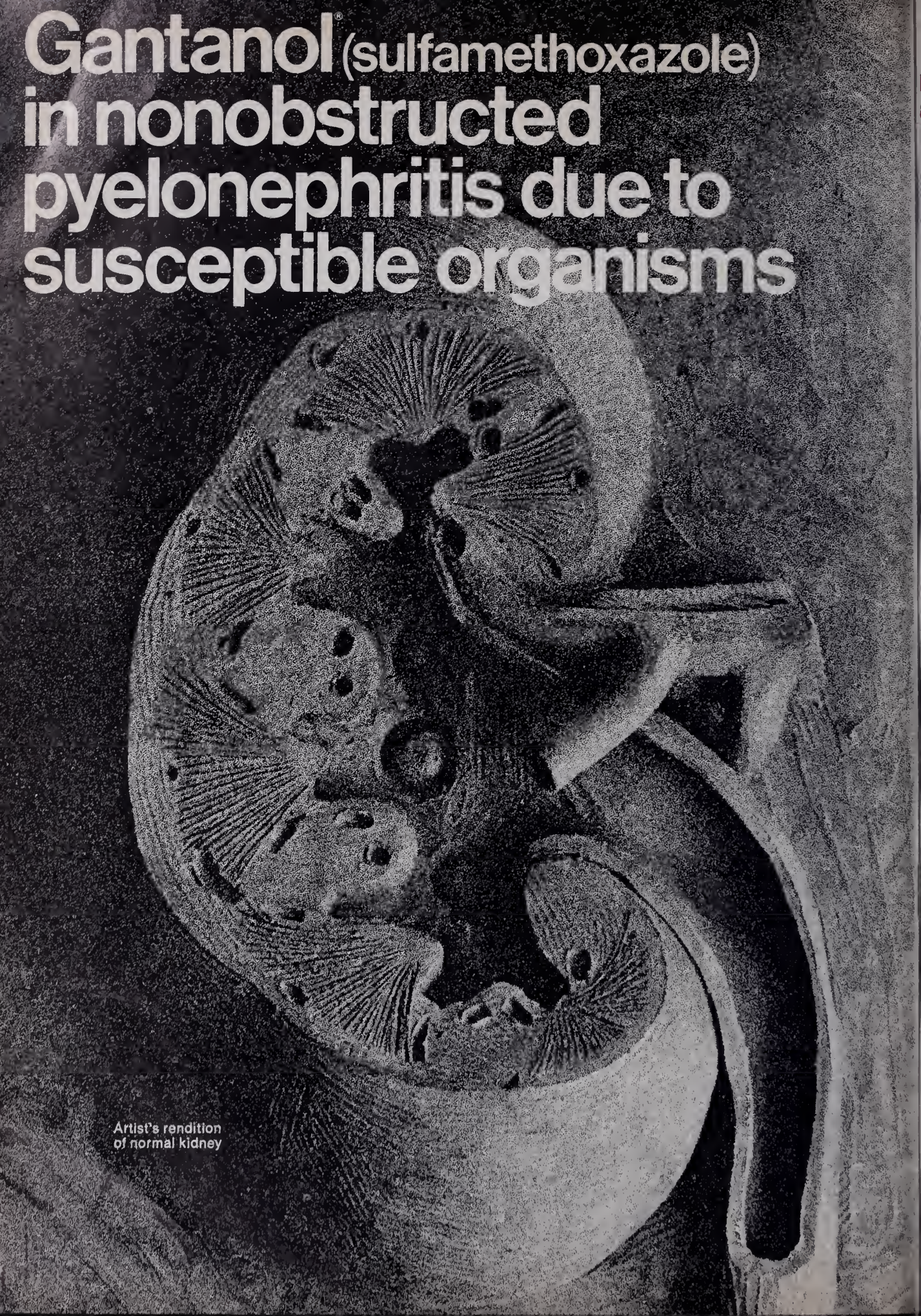
A solution of triphenyltetrazolium chloride, which turns a reddish purple in the presence of bacteria, was added to the plates after 6 hours. Renal slices from the untreated control animals consistently demonstrated heavy bacterial growth, as evidenced by dark staining.*

Distribution throughout *Macaca speciosa* renal parenchyma

At the dosage of 12.5 mg/kg of body weight, a diffuse stain pattern indicated partial inhibition of bacterial growth. Renal slices from monkeys given the 50 and 100 mg/kg doses showed no staining, indicating complete bacterial inhibition and *suggesting* antibacterial distribution throughout the parenchyma.*

*Mobley, J. E.; Redman, J. F., and Robbins, R. P.: *Surg. Gynec. Obstet.*, *131*:1122, 1970.

Gantanol® (sulfamethoxazole) in nonobstructed pyelonephritis due to susceptible organisms



Artist's rendition of normal kidney

Establishes antibacterial levels in blood and urine in from 2 to 3 hours

In from 2 to 3 hours of the initial 2-Gm adult dose, effective antibacterial levels of Gantanol® (sulfamethoxazole) are achieved in both blood and urine. This prompt, early treatment in acute nonobstructed pyelonephritis may help avert possible chronic sequelae.

Controls primary bacterial offenders

Antibacterial Gantanol (sulfamethoxazole) controls susceptible *E. coli,* the most common cause of urinary tract infections. It is also effective against other susceptible gram-negative and gram-positive urinary pathogens such as *Klebsiella-Aerobacter, Staph. aureus* and *Proteus mirabilis.*

Also effective in nonobstructed chronic and recurrent urinary tract infections

It is also common for the elderly and debilitated to develop chronic nonobstructed urinary tract infections, primarily pyelonephritis and cystitis. Such cases often respond satisfactorily to therapy with Gantanol.

B.I.D./T.I.D. schedule gives round-the-clock coverage

Subsequent 1-Gm doses can provide up to 12 hours of antibacterial activity. The *b.i.d.* dosage is recommended for mild to moderate infections; the *t.i.d.* for the more severe u.t.i. Gantanol provides coverage around the clock—coverage that is especially important during the hours of sleep, when urinary retention favors bacterial proliferation.

Your option: tablets or suspension

Gantanol is available in two convenient dosage forms—tablets or a pleasant-tasting suspension. It is generally well tolerated with relative freedom from complications. The usual precautions with sulfonamide therapy should be observed, including adequate fluid intake, frequent c.b.c.'s and urinalyses with microscopic examination. The most common side effects reported are nausea, vomiting and diarrhea. (It should also be noted that the increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent u.t.i.)

in nonobstructed pyelonephritis due to susceptible organisms

Gantanol®
(sulfamethoxazole)

Basic therapy

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies.

***Note:* Since *in vitro* sulfonamide sensitivity tests are not always reliable, carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent urinary tract infections.**

Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, *i.e.,* rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows: *Adults*—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) *b.i.d.* or *t.i.d.* depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs (½ tab or teasp.) *b.i.d.* Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Pinworm therapy is often a family affair





Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction, patients should be carefully monitored.
Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live Ascaris in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg Mintezol®

(THIABENDAZOLE | MSD)



so easy to take everyone in the family will keep to the regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

addendum

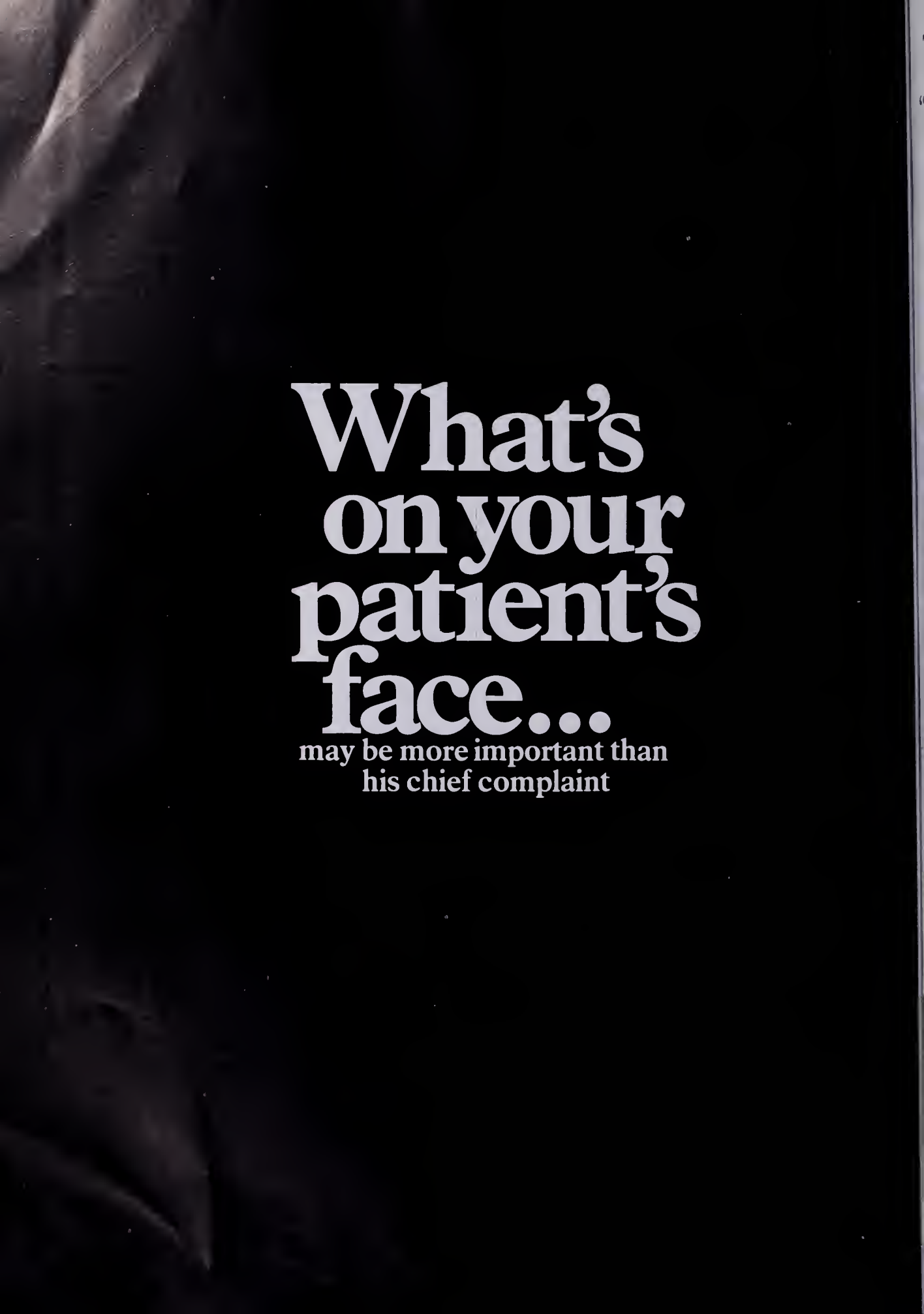
INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.


What's on your patient's face...
may be more important than his chief complaint

The lesions on his face may be solar/actinic—so-called "senile" keratoses...and they may be premalignant.

Solar, actinic or senile keratoses

These lesions may be called by several names, but they usually can be identified by the following characteristics: the typical lesion is flat or slightly elevated, of a brownish or reddish color, papular, dry, rough, adherent, and sharply defined. They commonly occur as multiple lesions, chiefly on the exposed portions of the skin.



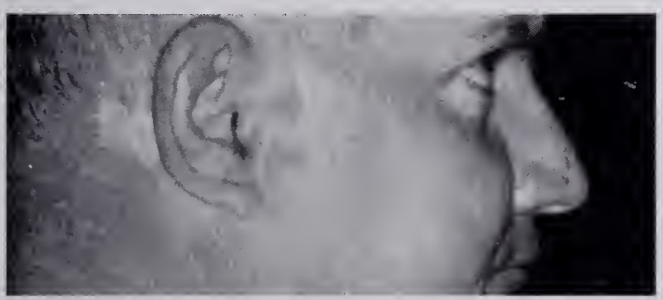
Patient P.T. seen on 3/29/67 shows typical lesions of moderately severe keratoses. Note residual scarring on ridge of nose from previous cryosurgical and electrosurgical procedures.*

Sequence of therapy/ selectivity of response

After several days of therapy with Efudex® (fluorouracil), erythema may begin to appear in the area of the lesions; the reaction usually reaches its height of unsightliness and discomfort within two weeks, declining after discontinuation of therapy. This reaction occurs in affected areas. Since the response is so predictable, lesions that do not respond should be biopsied.

Acceptable results

Treatment with Efudex provides highly favorable cosmetic results. Incidence of scarring is low. This is particularly important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.



Patient P.T. seen on 6/12/67, seven weeks after discontinuation of 5%-FU cream. Reaction has subsided. Residual scarring not seen except for that due to prior surgery. Inflammation has cleared and face is clear of keratotic lesions.*

*Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

This patient's lesions were resolved with

Efudex® (fluorouracil)

5% cream/solution ...a Roche exclusive

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Medical Director

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Administrator

Member Georgia Hospital Association

140/90 is normal blood pressure... or is it?

An extensive study based on nearly 4 million life insurance policies suggests that a blood pressure reading of 140/90 requires close medical supervision.

Study Findings. Twelve years ago the Society of Actuaries reported on an extensive study based on the lives and deaths represented by almost 4 million life insurance policies. From this vast survey—"The Build and Blood Pressure Study"[1]—insurance experts concluded that:

- Blood pressure above 140/90 is accompanied by increased morbidity and requires close medical attention.
- Even small increments in either systolic or diastolic blood pressure progressively and steeply shorten life expectancy.

Other Studies. Studies conducted with large numbers of patients since that time have echoed the above findings. Two studies published in 1970 -- the VA Cooperative Study Group on "Effects of Treatment on Morbidity in Hypertension"[2] and the "Framingham Study"[3]—suggest that treatment of even mild hypertension may, over time, offer significant benefits to the patient.

Another Point of View. Although a growing body of studies suggests that treatment of mild hypertension is warranted, medical opinion is not unanimous. Some clinicians recommend that drug treatment for mild hypertension be reserved for patients with additional risk factors such as smoking, high cholesterol levels, heart or kidney involvement, or a family history of vascular disease. Dr. Walter M. Kirkendall stated this position in his recent paper "What's With Hypertension These Days?"[4] Discussing the management of hypertension in patients with a sustained diastolic pressure up to 100 mm Hg, he said: "Generally, I do not recommend antihypertensive therapy unless patient's blood pressure approaches the upper limit for the group and a number of adverse factors exist, such as male sex, family history of vascular disease, youth, evidence of heart or kidney involvement."



Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

MSD
MERCK SHARP & DOHME

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

For a brief summary of prescribing information, please see next page.

1. Society of Actuaries, *The Build and Blood Pressure Study*, 1959.
2. Veterans Administration Cooperative Study Group on Antihypertensive Agents, "Effects of Treatment on Morbidity in Hypertension," JAMA *213*:1143-1152, Aug. 17, 1970.
3. Kannel, William B., *et al.*: "Epidemiologic Assessment of the Role of Blood Pressure in Stroke – The Framingham Study," JAMA *214*:301-310, Oct. 12, 1970.
4. Kirkendall, Walter M.: "What's With Hypertension These Days?" Consultant, Jan. 1971.

25- and 50-mg tablets

HydroDIURIL®

(Hydrochlorothiazide|MSD)

Therapy to Start With

Drug Therapy for Hypertension. Although opinion varies on when to start drug therapy for mild hypertension, many physicians agree that treatment should start with a thiazide diuretic such as HydroDIURIL. For the adult patient, the usual starting dosage is 50 mg b.i.d. Dosage adjustments are recommended as the patient responds to treatment. The patient whose therapy begins with HydroDIURIL frequently can continue to benefit from it, because HydroDIURIL usually maintains its antihypertensive effect even when therapy is prolonged.

CONTRAINDICATIONS: Anuria; increasing azotemia and oliguria during treatment of severe progressive renal disease. Known sensitivity to this compound. Nursing mothers; if use of drug is deemed essential, patient should stop nursing.

WARNINGS: May precipitate or increase azotemia. Use special caution in impaired renal function to avoid cumulative or toxic effects. Minor alterations of fluid and electrolyte balance may precipitate coma in hepatic cirrhosis.

When used with other antihypertensive drugs, careful observation for changes in blood pressure must be made, especially during initial therapy. Dosage of other antihypertensive agents, especially ganglion blockers, must be reduced by at least 50% because HydroDIURIL potentiates their action.

Stenosis and ulceration of the small bowel causing obstruction, hemorrhage, and perforation have been reported with the use of enteric-coated potassium tablets, either alone or with nonenteric-coated thiazides. Surgery was frequently required, and deaths have occurred. Such formulations should be used only when indicated and when dietary supplementation is impractical. Discontinue immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occurs.

Thiazides cross placenta and appear in cord blood. In women of childbearing age, potential benefits must be weighed against possible hazards to fetus, such as fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial asthma. The possibility of exacerbation or activation of systemic lupus erythematosus has been reported for sulfonamide derivatives, including thiazides.

PRECAUTIONS: Check for signs of fluid and electrolyte imbalance, particularly if vomiting is excessive or patient is receiving parenteral fluids. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances. Hypokalemia may develop (especially with brisk diuresis) in severe cirrhosis; with concomitant steroid or ACTH therapy; or with inadequate electrolyte intake. Digitalis therapy may exaggerate metabolic effects of hypokalemia, especially with reference to myocardial activity. Hypokalemia may be avoided or treated by use of potassium chloride or giving foods with a high potassium content. Similarly, any chloride deficit may be corrected by use of ammonium chloride (except in patients with hepatic disease) and largely prevented by a near normal salt intake. Hypochloremic alkalosis occurs infrequently and is rarely severe. In severely edematous patients with congestive failure or renal disease, a low salt syndrome may occur if dietary salt is unduly restricted, especially during hot weather.

Thiazides may increase responsiveness to tubocurarine. The antihypertensive effect of the drug may be enhanced in the postsympathectomy patient. Arterial responsiveness to norepinephrine is decreased, necessitating care in surgical patients. Discontinue drug 48 hours before elective surgery. Orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics.

Pathological changes in the parathyroid glands with hypercalcemia and hypophosphatemia have been seen in a few patients on prolonged thiazide therapy. The effect of discontinuing thiazide therapy on serum calcium and phosphorus levels may be helpful in assessing the need for parathyroid surgery in such patients. Parathyroidectomy has elicited subjective clinical improvement in most patients, but has no effect on hypertension. Thiazide therapy may be resumed after surgery.

Use cautiously in hyperuricemic or gouty patients; gout may be precipitated. May affect insulin requirements in diabetics; may induce hyperglycemia and glycosuria in latent diabetics.

ADVERSE REACTIONS: Rare reactions include thrombocytopenia, leukopenia, agranulocytosis, aplastic anemia, cholestasis, and pericholangiolitic hepatitis. Nausea, vomiting, diarrhea, dizziness, vertigo, paresthesias, transient blurred vision, sialadenitis, purpura, rash, urticaria, photosensitivity, or other hypersensitivity reactions may occur. Cutaneous vasculitis precipitated by thiazide diuretics has been reported in elderly patients on repeated and continuing exposure to several drugs. Scattered reports have linked thiazides to pancreatitis, xanthopsia, neonatal thrombocytopenia, and neonatal jaundice. When adverse reactions are moderate or severe, the dosage of thiazides should be reduced or therapy withdrawn.

For more detailed information, consult your MSD Representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK SHARP & DOHME

(Continued from Page 994)

his M. D. degree from there, into the Army. Two years were spent in the Army Hospital at Fort Hood, Texas, practicing his father's specialty, ophthalmology. Further residency training is now being obtained in Ophthalmology at Emory University.

The John M. Dixons are the parents of twins, a boy and a girl, who arrived during their time at Fort Hood.

—W. J. Mahoney, Jr.

Tips to . . .

Prevent Malpractice Claims

Do not practice law. Report every incident to your insurance company and let their attorneys decide the question of liability and the proper procedure.

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Dependability
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Reliability

When you prescribed Orinase®

(tolbutamide, Upjohn)

14 years ago, you had to rely on our experience.

An orally active hypoglycemic agent principally indicated in relatively mild, adult, maturity-onset, non-ketotic diabetes; also, as a supplement to insulin therapy in selected diabetic patients, it may effect a stabilization of labile diabetes and reduce insulin requirements. Certain patients intolerant to chlorpropamide therapy at usual therapeutic doses have subsequently been successfully managed with Orinase (tolbutamide).

Use in mild asymptomatic diabetic patients with abnormal glucose tolerance tests not responding to diet therapy may result in improvement of the glucose tolerance test.

Use in conjunction with phenformin is indicated when optimal control is not obtained with Orinase or phenformin alone.

Contraindications: Orinase alone is not effective in juvenile or growth-onset diabetes nor in unstable brittle diabetes where insulin therapy is required.

Orinase should not be used: when diabetes is complicated by acidosis, ketosis, or coma, or when a history of repeated bouts of acidosis or coma is obtained; in the presence of other acute complications such as fever, severe trauma, or infections; and in patients with severe renal insufficiency. Insulin is indicated in these circumstances.

Pregnancy Warning: The safety and usefulness of Orinase during pregnancy has not been established either from the standpoint of the mother or the fetus. Animal studies have demonstrated feticidal and teratogenic effects of doses of 1,000-2,500 mg./kg./day, but application to human subjects unknown. Therefore, Orinase is not recommended for the pregnant diabetic, and when administering Orinase to women of childbearing age, these facts should be borne in mind.

Precautions: Diagnostic and therapeutic measures necessary for optimal control with insulin are also necessary with Orinase. The patient on Orinase must be fully instructed: about the nature of his disease; how to prevent and detect complications; how to control his condition; not to neglect dietary restrictions, develop a careless attitude or disregard instructions relative to body weight, exercise, personal hygiene, and avoidance of infection; how to recognize and counteract impending hypoglycemia; how and when to test for glycosuria and ketonuria; how to use insulin; and to report to the physician immediately if he does not feel as well as usual.

Caution, very close observation, and careful adjustment of dose are necessary when: insulin is withdrawn during the trial period in order to avoid ketosis, acidosis, and coma; thiazide diuretics are administered which may result in aggravation of diabetic state and increased tolbutamide requirement, temporary loss of control, or even secondary failure; treating patients with impaired hepatic and/or renal function and debilitated, malnourished, or semistarved patients in order to avoid severe hypoglycemia which may require corrective therapy over several days; and treating patients with severe trauma, infection, or surgical procedures where temporary return to insulin or addition of insulin may be necessary. Response to tolbutamide is diminished in patients receiving therapy with beta blocking agents.

As some diabetics are not suitable candidates, it is essential that the physician familiarize himself with the indications, limits of application, and selection of patients for therapy.

Patients must be under continuous medical supervision, and during the initial test period should communicate with the physi-

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You also know the importance of close monitoring of the patient. Although uncommon, severe hypoglycemia may occur if the dosage is not tailored to suit his requirements.

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0.5 g. tablets

(tolbutamide, Upjohn)

cian daily, and during the first month report at least once weekly for physical examination and definitive evaluation. After a month, examinations are recommended monthly or as indicated. Appearance of ketonuria, increase in glycosuria, unsatisfactory lowering or persistent elevation of blood sugar, or failure to obtain and hold clinical improvement indicate nonresponsiveness to Orinase (tolbutamide). Orinase does not obviate need for maintaining standard diet regulation. Uncooperative patients should be considered unsuitable for therapy. Prescriptions should be refilled only on specific instruction of physician. In treating mild asymptomatic diabetic patients with abnormal glucose tolerance, glucose tolerance tests should be obtained at three- to six-month intervals. Orinase is not an oral insulin or a substitute for insulin and must not be used as sole therapy in juvenile diabetes or in diabetes complicated by acidosis or coma where insulin is indispensable.

If phenformin is prescribed in combination with Orinase, appropriate package literature should be consulted.

Adverse Reactions: Severe hypoglycemia, though uncommon, may occur and may mimic acute neurologic disorders such as cerebral thrombosis. Certain factors such as hepatic and renal disease, malnutrition, advanced age, alcohol ingestion, and adrenal and pituitary insufficiency may predispose to hypoglycemia and certain drugs such as insulin, phenformin, sulfonamides, oxyphenbutazone, salicylates, probenecid, monamine oxidase inhibitors, phenylbutazone, bishydroxycoumarin, and phenyramidol may prolong or enhance the action of Orinase and increase risk of hypoglycemia. Orinase long-term therapy has been reported to cause reduction in RAI uptake without producing clinical hypothyroidism or thyroid enlargement and at high doses is mildly goitrogenic in animals. Photosensitivity reactions, disulfiram-like reactions after alcohol ingestion, and false-positive tests for urine albumin have been reported.

Although usually not serious, gastrointestinal disturbances (nausea, epigastric fullness, and heartburn) and headache appear to be dose related and frequently disappear with reduction of dose or administration with meals. Allergic skin reactions (pruritus, erythema, urticaria, and morbilliform or maculopapular eruptions) are transient, usually not serious, and frequently disappear with continued administration. Orinase should be discontinued if skin reactions persist. Recent reports indicate that long-term use of Orinase has no appreciable effect on body weight.

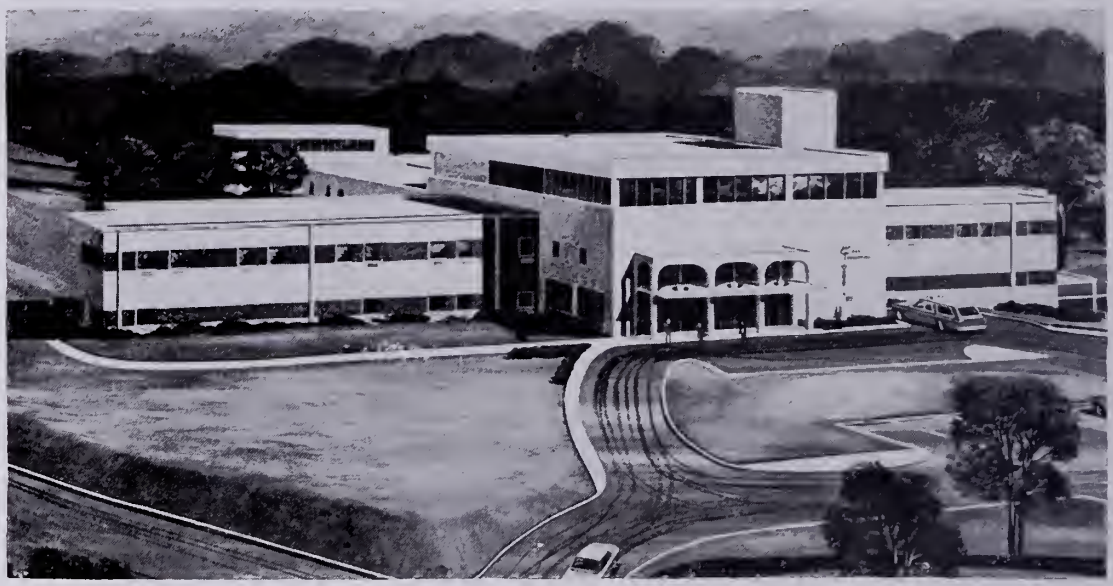
Orinase appears to be remarkably free from gross clinical toxicity: crystalluria or other renal abnormalities have not been observed; incidence of liver dysfunction is remarkably low and jaundice has been rare and cleared readily on discontinuation of drug (carcinoma of the pancreas or other biliary obstruction should be ruled out in persistent jaundice); leukopenia; agranulocytosis; thrombocytopenia; hemolytic anemia; aplastic anemia; pancytopenia; and hepatic porphyria and porphyria cutanea tarda have been reported.

Supplied: *0.5 g. Tablets*—bottles of 50, 200, 500, and 1,000, and cartons of 100 in foil strips.

For additional product information, see your Upjohn representative or consult the package insert.

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of moderate to severe intensity

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- **Not subject to narcotic controls:** convenient to prescribe – day or night – even by phone.
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50 mg. Tablets

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brand of

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the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it.

Warnings: *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Patients Receiving Narcotics. Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: *Manifestations.* Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are *not* effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

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Course In Laryngology And Bronchoesophagology

The Department of Otolaryngology of the Abraham Lincoln School of Medicine and the University of Illinois Hospital Eye and Ear Infirmary, University of Illinois at the Medical Center, will conduct a continuing education course in Laryngology and Bronchoesophagology November 13 through 18, 1972. The course is limited to fifteen physicians and will be under the direction of Paul H. Holinger, M. D. It will be held largely at the Eye and Ear Infirmary, 1855 West Taylor Street, Chicago, and will include visits to a number of other Chicago hospitals. Instruction will be provided by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances, syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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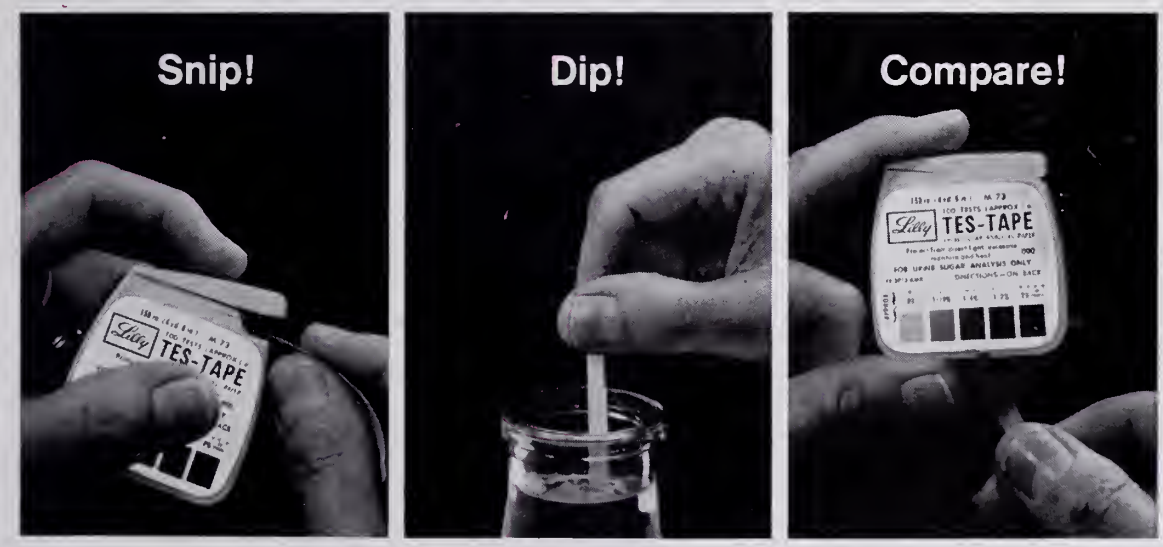
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Beltone® ELECTRONICS CORPORATION

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Librium® (chlordiazepoxide HCl) and safety

Librium (chlordiazepoxide HCl), after more than a decade of wide clinical use, continues to reflect a wide margin of safety. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated.

Antianxiety effectiveness: Demonstrated in a broad range of psychologic and physical dysfunctions; indicated when reassurance and counseling are not enough and until, in the physician's judgment, anxiety has been reduced to tolerable, appropriate levels.

Effect on mental acuity: Usually minimal on proper maintenance dosage. (See Warnings in summary of prescribing information.)

Concomitant use: Is used as adjunctive antianxiety therapy concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, antihypertensive agents, diuretics and vasodilators.

in relief of clinically significant anxiety

Librium®
(chlordiazepoxide HCl)

5-mg, 10-mg, 25-mg capsules
up to 100 mg daily in severe anxiety

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances o skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Supplied: Librium capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

C.F.

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